PB81-181448

Water Resources Data for California
Water Year 1979. Volume 1

(U.S.) Geological Survey
Menlo Park, CA

Jan 81

U.S. Department of Commerce
National Technical Information Service
NTIS

PB81-181448

Water Resources Data for California

Volume 1. Colorado River Basin, Southern Great Basin from Mexican Border to Mono Lake Basin, and Pacific Slope Basins from Tijuana River to Santa Maria River

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CA-79-1

WATER YEAR 1979

Prepared in cooperation with the California Department of Water Resources and with other agencies

REPRODUCED BY
NATIONAL TECHNICAL INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA 22161

CALENDAR FOR WATER YEAR 1979

1978

OCTOBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

NOVEMBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

DECEMBER

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

1979

JANUARY

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

FEBRUARY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

MARCH

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

APRIL

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

MAY

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

JUNE

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

JULY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

AUGUST

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

SEPTEMBER

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

REPORT DOCUMENTATION PAGE	**1. REPORT NO.** USGS/WRD/HD-80/021	**2.**	**3. Recipient's Accession No.** PB81 181448

4. Title and Subtitle Water Resources Data for California, Water Year 1979
Volume 1. Colorado River basin, Southern Great Basin from Mexican Border to Mono Lake basin, and Pacific Slope basins from Tijuana River to Santa Maria River

5. Report Date January 1981

6.

7. Author(s)
U.S. Geological Survey

8. Performing Organization Rept. No.
USGS-WDR-CA-79-1

9. Performing Organization Name and Address
U.S. Geological Survey, Water Resources Division
California District
345 Middlefield Road
Menlo Park, CA 94025

10. Project/Task/Work Unit No.

11. Contract(C) or Grant(G) No.
(C)
(G)

12. Sponsoring Organization Name and Address
U.S. Geological Survey, Water Resources Division
California District
345 Middlefield Road
Menlo Park, CA 94025

13. Type of Report & Period Covered
Annual--Oct. 1, 1978, to Sept. 30, 1979

14.

15. Supplementary Notes
Prepared in cooperation with the California Department of Water Resources and other agencies

The report includes

It

16. Abstract (Limit: 200 words)

Volume 1 of water resources data for the 1979 water year for California consists of records of stage, discharge, and water quality of streams; stage, contents, and water quality in lakes and reservoirs; and water levels in wells. This report contains discharge records for 202 gaging stations; stage and contents for 26 lakes and reservoirs; water quality for 68 stations; water levels for 150 observation wells. Also included are 16 crest-stage partial-record stations. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in California.

17. Document Analysis a. Descriptors
*California, *Hydrologic data, *Surface water, *Water quality, *Ground water, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediment, Water temperatures, Sampling sites, Water levels, Water analyses.

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

18. Availability Statement No restriction on distribution
This report may be purchased from:
National Technical Information Service
Springfield, VA 22161

19. Security Class (This Report) UNCLASSIFIED

20. Security Class (This Page) UNCLASSIFIED

21. No. of Pages

22. Price

U.S. DEPARTMENT OF THE INTERIOR
March 3 1849

Water Resources Data for California

Volume 1. Colorado River Basin, Southern Great Basin from Mexican Border to Mono Lake Basin, and Pacific Slope Basins from Tijuana River to Santa Maria River

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CA-79-1

WATER YEAR 1979

Prepared in cooperation with the California Department of Water Resources and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

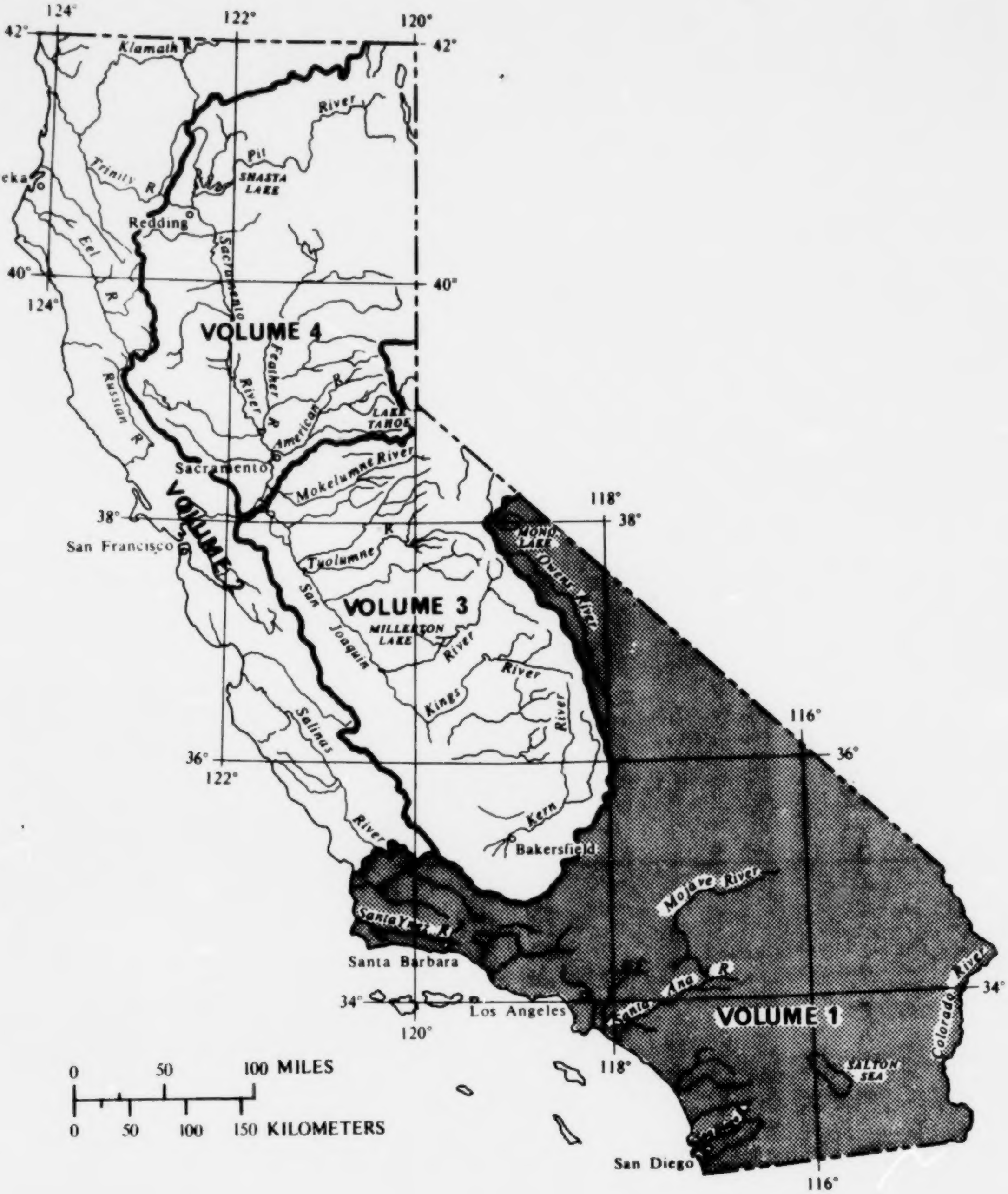
CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

H. William Menard, Director

For information on the water program in California write to
District Chief, Water Resources Division
U.S. Geological Survey
855 Oak Grove Avenue
Menlo Park, California 94025

1981


124°
122°
120°
42°
Klamath R
River
Pit
Trinity R
SHASTA LAKE
Eureka
Redding
Eel R
Sacramento River
40°
VOLUME 4
Feather R
Russian R
American R
LAKE TAHOE
Sacramento
Mokelumne River
VOLUME 2
38°
San Francisco
118°
MONO LAKE
Owens River
Tuolumne R
San Joaquin
VOLUME 3
MILLERTON LAKE
Kings River
River
36°
116°
Salinas River
Kern
Bakersfield
Mojave River
Santa Ynez R
Santa Barbara
Santa Ana R
34°
Los Angeles
VOLUME 1
Colorado River
SALTON SEA
San Diego
0 50 100 MILES
0 50 100 150 KILOMETERS

Area covered by volumes in the annual series on water-resources data for California. Area covered by this volume is shaded.

PREFACE

This report was prepared by personnel of the California District, Water Resources Division, U.S. Geological Survey, under the supervision of Richard M. Bloyd, District Chief, and J. D. Bredehoeft, Regional Hydrologist, Western Region. It was done in cooperation with the California Department of Water Resources and with other agencies.

This report is one of a series issued by State. General direction for the series is by Philip Cohen, Chief Hydrologist.

Data for California are in four volumes as follows:

Volume 1.	Colorado River Basin, Southern Great Basin from Mexican Border to Mono Lake Basin, and Pacific Slope Basins from Tijuana River to Santa Maria River
Volume 2.	Pacific Slope Basins from Arroyo Grande to Oregon State Line except Central Valley
Volume 3.	Southern Central Valley Basins and The Great Basin from Walker River to Truckee River
Volume 4.	Northern Central Valley Basins and The Great Basin from Honey Lake Basin to Oregon State Line

WATER RESOURCES DIVISION

Laguna Niguel Subdistrict

Darwin Knochenmus, Chief

This report was prepared under the direction of:

Robert J. Longfield, Chief, Hydrologic Data Section
Timothy P. Landis, Chief, Surface Water Unit
Charles E. Lamb, Chief, Ground Water Unit
Michael T. Butcher, Chief, Santa Ana Field Group
John A. Singer, Chief, Santa Barbara Field Office
Robert L. Blazs, Hydrologist
James C. Bowers, Hydrologist

Prepared by:

Kay L. Spiegl, Hydrologic Technician
Julia A. Schulenburg, Hydrologic Technician
Dorothy E. Maltby, Computer Technician

Assisted by:

Anita M. Bales, Hydrologic Field Assistant
Gary E. Barbato, Hydrologic Technician
Charles Berenbrock, Hydrologic Technician
James G. Brown, Hydrologic Technician
Frank A. Carson, Hydrologic Technician
Michael J. Dai, Hydrologic Technician
Daniel J. Downing, Hydrologic Technician
Karen T. Downing, Data Transcriber
Judith T. Faughn, Hydrologic Technician
Allan D. Flowers, Hydrologic Technician
Nancy A. Gilligan, Clerk-Typist
John A. Hanneman, Hydrologic Technician
Donald T. Hartley, Hydrologic Technician
Christopher W. Holmes, Hydrologic Technician
Gregg N. Ikehara, Hydrologic Technician
John J. Janssen, Hydrologic Technician
Coleen Kegg, Hydrologic Technician
Floyd E. Lee, Hydrologic Technician
Ray A. Leigh, Hydrologic Technician
Christopher E. McConaughy, Hydrologist
Michael C. McFadden, Hydrologic Technician
Dan L. Patridge, Hydrologic Technician
Gladys M. Pigage, Hydrologic Technician
Suzanne C. Pompe, Hydrologic Technician
Lisa A. Redmond, Editorial Assistant
J. Frank Sablan, Hydrologic Technician
Jacob Sarkin, Hydrologic Technician
Patricia B. Schrahe, Data Transcriber
Martin E. Swaim, Hydrologic Technician
Barbara J. Symonds, Editorial Clerk
Debra J. Thompson, Hydrologic Technician
James L. Van Maanen, Hydrologic Technician
John T. Van Den Bergh, Hydrologic Technician
Craig L. Westenburg, Hydrologic Technician

CONTENTS

Page

Preface.......... III

List of surface-water and water-quality stations, in downstream order, for which records are published.......... IX

Introduction.......... 1

Cooperation.......... 2

Hydrologic conditions.......... 3

Definition of terms.......... 3

Downstream order and station number.......... 13

Numbering system for wells and miscellaneous sites.......... 14

- Local well numbers.......... 15

Special networks and programs.......... 16

Explanation of stage and water-discharge records.......... 17

- Collection and computation of data.......... 17
- Accuracy of field data and computed results.......... 20
- Other data available.......... 20
- Records of discharge collected by agencies other than the Geological Survey.......... 20

Explanation of water-quality records.......... 21

- Collection and examination of data.......... 21
- Water analysis.......... 21
- Water temperature.......... 21
- Sediment.......... 22
- Turbidity.......... 23

Explanation of ground-water-level records.......... 23

- Collection of the data.......... 23

Publications of techniques of water-resources investigations.......... 24

Gaging-station and water-quality records.......... 26

- Discharge at partial-record stations.......... 536
  - Crest-stage partial-record stations.......... 536
  - Measurements made at miscellaneous sites.......... 538

Ground-water records.......... 539

- Ground-water levels and quality of ground water listed by county.......... 539

Index.......... 597

ILLUSTRATIONS

Page
Figure 1. Map of California showing runoff for the current water year.... 4
2. System for numbering wells and miscellaneous sites (latitude and longitude)... 14
3. Local well-numbering system................................... 15
4. Schematic diagram showing gaging stations and water-quality stations on streams, diversions, and return flows between Imperial Dam and the southerly international boundary....... 136
5-6. Schematic diagrams showing diversions and storage:
    5. Santa Ana River basin.................................... 302
    6. San Gabriel and Los Angeles River basins................. 400

SURFACE-WATER AND WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

Letters after station name designate type of data:
(d), discharge; (l), lake contents; (p), precipitation; (c), chemical;
(b), biological; (t), water temperature; and (s), sediment

Page

COLORADO RIVER BASIN
COLORADO RIVER:

Colorado River below Hoover Dam, Ariz.-Nev. (dcbs) 26
Colorado River below Davis Dam, Ariz.-Nev. (dc) 36
Colorado River at Needles (d) 39
Colorado River near Topock, Ariz. (dc) 40

LAKE HAVASU:
DIVERSION FROM LAKE HAVASU

Colorado River aqueduct near Parker Dam, Ariz.-Calif. (d) 44
Colorado River aqueduct near San Jacinto (cbs) 45
Lake Havasu near Parker Dam, Ariz.-Calif. (l) 53
Colorado River below Parker Dam, Ariz.-Calif. (dc) 55

TRIBUTARIES AND DIVERSIONS BETWEEN PARKER DAM AND PALO VERDE DAM

Palo Verde Canal near Blythe (dc) 62
Colorado River at Palo Verde Dam, Ariz.-Calif. (d) 69
Palo Verde Irrigation District Olive Lake drain near Blythe (c) 70
Palo Verde Irrigation District Outfall drain near Palo Verde (c) 72
Palo Verde Irrigation District Anderson drain near Palo Verde (c) 77
Colorado River above Imperial Dam, Ariz.-Calif. (dcbt) 78
Colorado River below Laguna Dam, Ariz.-Calif. (dc) 98
Colorado River at northerly international boundary, above Morelos Dam, near Andrade (dcb) 103

DIVERSIONS AND RETURN FLOWS AT AND BELOW IMPERIAL DAM

Gila Gravity Main Canal at Imperial Dam, Ariz.-Calif. (dct) 122
All-American Canal near Imperial Dam, Ariz.-Calif. (d) 125
Pilot Knob powerplant and wasteway near Pilot Knob (d) 127
All-American Canal below Pilot Knob wasteway (d) 127
All-American Canal below Drop 1 near Calexico (c) 128
Return surface flows below Imperial Dam, Ariz.-Calif. (d) 130

THE GREAT BASIN
PANAMINT VALLEY

Darwin Creek near Darwin (d) 137

DEATH VALLEY

Salt Creek near Stovepipe Wells (d) 138
Amargosa River at Tecopa (d) 139

BRISTOL LAKE BASIN

Caruthers Creek near Ivanpah (d) 140

SALTON SEA BASIN

Salton Sea near Westmorland (l) 141
Inflow to Salton Sea (d) 141
Salt Creek near Mecca (d) 142
Alamo River at Drop No. 3, near Calipatria (cbs) 143
Alamo River near Niland (dcb) 146
New River at international boundary, at Calexico (cbts) 151
New River near Westmorland (dc) 164
San Felipe Creek near Julian (d) 168
Coyote Creek near Borrego Springs (d) 169
Borrego Palm Creek near Borrego Springs (d) 170

Carrizo Creek:

Vallecito Creek near Julian (d) 171
San Felipe Creek near Westmorland (d) 172
Whitewater River at White Water (dc) 173
San Gorgonio River near Banning (d) 176
San Gorgonio River near White Water (d) 177
Snow Creek near White Water (d) 178
Mission Creek near Desert Hot Springs (dp) 179
Chino Canyon Creek near Palm Springs (d) 180

SURFACE-WATER AND WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

Page

THE GREAT BASIN--Continued
  SALTON SEA BASIN--Continued
    New River:
      Morongo Wash:
      Tahquitz Creek near Palm Springs (d) 181
        Palm Canyon Creek near Palm Springs (d) 182
          Andreas Creek near Palm Springs (d) 183
      Deep Creek near Palm Desert (d) 184
    Whitewater River at Indio (d) 185
    Whitewater River near Mecca (d) 186
    Wasteway No. 1 near Mecca (d) 187
  MOJAVE RIVER BASIN
  Deep Creek (head of Mojave River) near Hesperia (d) 188
    West Fork Mojave River:
      Houston Creek above Lake Gregory at Crestline (d) 189
        Abondigas Creek above Lake Gregory at Crestline (d) 190
      Lake Gregory at Crestline (l) 191
      Houston Creek below Lake Gregory at Crestline (d) 192
    West Fork Mojave River near Hesperia (d) 193
  Mojave River below Forks Reservoir, near Hesperia (c) 194
  Mojave River at lower narrows, near Victorville (dcbts) 195
  Mojave River near Hodge (d) 207
  Mojave River at Barstow (d) 208
  Mojave River at Afton (d) 209
  ANTELOPE VALLEY
    Big Rock Creek near Valyermo (dt) 210
    Little Rock Creek near Little Rock (d) 213
    Oak Creek near Mojave (d) 214
  KOEHN LAKE BASIN
    Pine Tree Creek near Mojave (d) 215
  OWENS LAKE BASIN
    Owens River:
        Pine Creek at division box, near Bishop (d) 216
      Bishop Creek below powerplant No. 6, near Bishop (d) 217
    Owens River below Tinemaha Reservoir, near Big Pine (dcbts) 218
    Owens River at Keeler Bridge, near Lone Pine (d) 228
  MONO LAKE BASIN
  Mono Lake near Mono Lake (l) 229
    Mill Creek below Lundy Lake, near Mono Lake (d) 230
    Rush Creek below Agnew Lake, near June Lake (d) 231
    Rush Creek above Grant Lake, near June Lake (d) 232
    Lee Vining Creek near Lee Vining (d) 233
PACIFIC SLOPE BASINS IN CALIFORNIA
  TIJUANA RIVER BASIN
  Cottonwood Creek (head of Tijuana River) above Tecate Creek, near Dulzura (d) 234
    Tecate Creek:
      Campo Creek near Campo (d) 235
  Tijuana River near Dulzura (d) 236
    Rodriguez Reservoir at Rodriguez Dam, Baja California, Mexico (l) 237
  Tijuana River near Nestor (d) 238
  OTAY RIVER BASIN
  Lower Otay Reservoir near Chula Vista (l) 239
  SWEETWATER RIVER BASIN
  Sweetwater River near Descanso (d) 240
  Sweetwater Reservoir near National City (l) 241
  SAN DIEGO RIVER BASIN
  El Capitan Reservoir near Lakeside (l) 242
    San Vicente Reservoir near Lakeside (l) 243
  San Diego River near Santee (d) 244
  LOS PENASQUITOS CREEK BASIN
  Poway Creek (head of Los Penasquitos Creek), near Poway (d) 245
    Rattlesnake Creek at Poway (d) 246

Page

PACIFIC SLOPE BASINS IN CALIFORNIA--Continued

LOS PENASQUITOS CREEK BASIN--Continued

- Beeler Creek at Pomerado Road, near Poway (d) 247
- Los Penasquitos Creek below Poway Creek, near Poway (d) 248
- Los Penasquitos Creek near Poway (d) 249

SAN DIEGUITO RIVER BASIN

- Santa Ysabel Creek (head of San Dieguito River) near Ramona (d) 250
- Santa Ysabel Creek near San Pasqual (d) 251
  - Guejito Creek near San Pasqual (d) 252
  - Santa Maria Creek near Ramona (d) 253
  - Lake Hodges near Escondido (l) 254

ESCONDIDO CREEK BASIN

- Lake Wohlford near Escondido (l) 255

SAN LUIS REY RIVER BASIN

- San Luis Rey River:
  - Agua Caliente Creek near Warner Springs (d) 256
  - West Fork San Luis Rey River near Warner Springs (d) 257
  - Pauma Creek near Pauma Valley (d) 258
- San Luis Rey River at Monserate Narrows, near Pala (d) 260
  - Keys Creek:
    - Keys Creek tributary at Valley Center (d) 261
- San Luis Rey River near Bonsall (d) 262
- San Luis Rey River at Oceanside (dcbs) 263

SANTA MARGARITA RIVER BASIN

- Temecula Creek (head of Santa Margarita River) near Aguanga (d) 270
  - Vail Lake near Temecula (l) 271
  - Murrieta Creek at Temecula (d) 272
- Santa Margarita River near Temecula (d) 273
- Santa Margarita River near Fallbrook (dc) 274
- Santa Margarita River at Ysidora (d) 277

LAS FLORES CREEK BASIN

- Las Flores Creek near Oceanside (d) 278

SAN JUAN CREEK BASIN

- San Juan Creek at San Juan Capistrano (dts) 279
  - Arroyo Trabuco:
    - Oso Creek at Crown Valley Parkway, near Mission Viejo (d) 284

ALISO CREEK BASIN

- Aliso Creek at El Toro (d) 285

SAN DIEGO CREEK BASIN

- San Diego Creek at Sand Canyon Avenue, near Irvine (dts) 286
  - Peters Canyon Wash:
    - El Modena-Irvine Channel near Irvine (dts) 291
    - San Diego Creek at Campus Drive, near Irvine (dts) 296

SANTA ANA RIVER BASIN

- Santa Ana River:
  - Bear Creek:
  - Big Bear Lake near Big Bear Lake (l) 303
- Santa Ana River near Mentone (d) 304
  - Mill Creek near Yucaipa (d) 306
  - Plunge Creek near East Highlands (d) 308
  - Warm Creek:
    - City Creek near Highland (d) 310
  - Santa Ana River at Waterman Avenue, at San Bernardino (dts) 312
  - San Timoteo Creek:
    - Little San Gorgonio Creek near Beaumont (d) 316
  - San Timoteo Creek near Redlands (ds) 317
  - San Timoteo Creek near Loma Linda (s) 318
  - Warm Creek:
    - East Twin Creek near Arrowhead Springs (d) 321
    - Waterman Canyon Creek near Arrowhead Springs (d) 322
    - Warm Creek Floodway at San Bernardino (d) 323
    - San Bernardino Water Quality Control Plant at San Bernardino (dc) ... 324
  - Santa Ana River at E Street, near San Bernardino (d) 328

Page

PACIFIC SLOPE BASINS IN CALIFORNIA--Continued

SANTA ANA RIVER BASIN--Continued

- Warm Creek near San Bernardino (d) 329
  - Meeks and Daley Canal near Colton (d) 330
  - Lytle Creek near Fontana (d) 331
    - Cajon Creek:
      - Cajon Creek near Keenbrook (d) 333
      - Lone Pine Creek near Keenbrook (d) 334
      - Devil Canyon Creek near San Bernardino (d) 335
  - Lytle Creek at Colton (d) 336

Santa Ana River at Mission Boulevard, at Riverside (d) 337
Santa Ana River at MWD Crossing, near Arlington (dc) 338
Riverside Water Quality Control Plant at Riverside Narrows, near Arlington (dc) 340
Santa Ana River at Prado Park, near Corona (dts) 344

- San Jacinto River:
- Lake Hemet near Idyllwild (l) 349
- San Jacinto River near San Jacinto (d) 350
  - Bautista Creek near Valle Vista (d) 352
- San Jacinto River at Railroad Canyon weir, near Elsinore (d) 353
- San Jacinto River near Elsinore (d) 354
- Temescal Creek near Corona (d) 355
- Chino Creek:
  - San Antonio Creek below San Antonio Dam (d) 356
- Chino Creek at Schaefer Avenue, near Chino (d) 357
  - Cucamonga Creek near Mira Loma (ds) 358

Santa Ana River below Prado Dam (dcbts) 360
Santa Ana River at Imperial Highway, near Anaheim (dts) 376

- Santa Ana River spreading diversion below Imperial Highway, near Anaheim (dc) 382
- Carbon Creek below Carbon Canyon Dam (d) 386

Santa Ana River at Ball Road at Anaheim (dts) 387

- Santiago Creek at Modjeska (d) 393
- Santiago Creek at Santa Ana (d) 394

Santa Ana River at Santa Ana (dts) 395

SAN GABRIEL RIVER BASIN

East Fork San Gabriel River (head of San Gabriel River) near Camp Bonita (d) 401
San Gabriel River at Azusa powerhouse, at Azusa (c) 402

- Fish Creek near Duarte (d) 403

San Gabriel River below Santa Fe Dam, near Baldwin Park (d) 404
San Gabriel River above Whittier Narrows Dam (d) 405
San Gabriel River at Whittier Narrows (c) 406
San Gabriel River at Spring Street, near Los Alamitos (d) 407

- Coyote Creek:
  - Brea Creek below Brea Dam, near Fullerton (d) 408
    - Fullerton Creek below Fullerton Dam, near Brea (d) 409
      - Fullerton Creek at Richman Avenue, at Fullerton (d) 410
- Coyote Creek at Los Alamitos (d) 411

LOS ANGELES RIVER BASIN

Los Angeles River at Sepulveda Dam (d) 412

- Pacoima Creek near San Fernando (d) 413
- Big Tujunga Creek near Sunland (d) 414
- Big Tujunga Creek below Hansen Dam (d) 415

Los Angeles River at Los Angeles (d) 416

- Arroyo Seco near Pasadena (d) 417
- Rio Hondo above Whittier Narrows Dam (d) 418
- Alhambra Wash at Klingerman Street near Montebello (d) 419
- Rio Hondo below Whittier Narrows Dam (d) 420
- Rio Hondo near Downey (d) 421

Los Angeles River at Long Beach (d) 422
Los Angeles River at Willow Street Bridge, at Long Beach (cbs) 423

TOPANGA CREEK BASIN

Topanga Creek near Topanga Beach (d) 431

SURFACE-WATER AND WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

Page

PACIFIC SLOPE BASINS IN CALIFORNIA--Continued

MALIBU CREEK BASIN

Malibu Creek at Crater Camp, near Calabasas (d) 432

CALLEGUAS CREEK BASIN

Calleguas Creek:

  Arroyo Simi near Simi (d) 433
  Conejo Creek above Highway 101, near Camarillo (d) 434
Calleguas Creek at Camarillo State Hospital (d) 435

SANTA CLARA RIVER BASIN

Santa Clara River above railroad station, near Lang (d) 436
  South Fork Santa Clara River at Saugus (d) 437
Santa Clara River at Los Angeles-Ventura County line (dcbs) 438

  Lockwood Creek:

  Lockwood Creek at Gorge, near Stauffer (d) 446
  Piru Creek above Frenchmans Flat (c) 447
  Piru Creek above Lake Piru (dc) 449
  Lake Piru near Piru (l) 452
  Piru Creek below Santa Felicia Dam (dc) 453
  Hopper Creek near Piru (d) 456
  Sespe Creek near Wheeler Springs (d) 457
  Sespe Creek near Fillmore (dc) 458
  Santa Clara River near Santa Paula (c) 463
  Santa Paula Creek near Santa Paula (dc) 464
  Saticoy diversion near Saticoy (dc) 468
Santa Clara River at Montalvo (dts) 471

VENTURA RIVER BASIN

Matilija Creek (head of Ventura River):

Matilija Reservoir at Matilija Hot Springs (l) 478
Matilija Creek at Matilija Hot Springs (dc) 479
  North Fork Matilija Creek at Matilija Hot Springs (d) 481
  San Antonio Creek at Casitas Springs (d) 482
  Coyote Creek near Oak View (d) 483
  Santa Ana Creek near Oak View (d) 484
    Lake Casitas near Casitas Springs (l) 485
  Coyote Creek near Ventura (d) 486
Ventura River near Ventura (dcts) 487

CARPINTERIA CREEK BASIN

Carpinteria Creek near Carpinteria (dc) 494

MISSION CREEK BASIN

Mission Creek near Mission Street, at Santa Barbara (d) 496

ARROYO BURRO CREEK BASIN

Arroyo Burro Creek at Santa Barbara (d) 497
  Maria Ygnacio Creek at University Drive, near Goleta (d) 498
Atascadero Creek near Goleta (dc) 499

SAN JOSE CREEK BASIN

San Jose Creek near Goleta (dc) 501
San Jose Creek at Goleta (d) 503

GAVIOTA CREEK BASIN

Gaviota Creek near GaViota (d) 504

JALAMA CREEK BASIN

Jalama Creek near Lompoc (d) 505

SANTA YNEZ RIVER BASIN

Santa Ynez River at Jameson Lake, near Montecito (l) 506
Santa Ynez River above Gibraltar Dam, near Santa Barbara (l) 507
Santa Ynez River below Gibraltar Dam, near Santa Barbara (d) 508
Santa Ynez River below Los Laureles Canyon, near Santa Ynez (d) 509
  Santa Cruz Creek near Santa Ynez (d) 510
Lake Cachuma near Santa Ynez (l) 511
  Alamo Pintado Creek near Solvang (d) 512
  Alisal Reservoir near Solvang (l) 513
Santa Ynez River at Solvang (d) 514
  Zaca Creek near Buellton (d) 515
  Salsipuedes Creek near Lompoc (dc) 516
Santa Ynez River near Lompoc (dc) 518

SURFACE-WATER AND WATER-QUALITY STATIONS,
IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

Page

PACIFIC SLOPE BASINS IN CALIFORNIA--Continued
SANTA YNEZ RIVER BASIN--Continued
  Miguelito Creek at Lompoc (d) 520
Santa Ynez River at Pine Canyon, near Lompoc (dc) 521
SAN ANTONIO CREEK BASIN
San Antonio Creek at Los Alamos (d) 523
San Antonio Creek near Casmalia (dc) 524
SANTA MARIA RIVER BASIN
Cuyama River (head of Santa Maria River):
Cuyama River below Buckhorn Canyon, near Santa Maria (dc) 526
  Huasna River near Arroyo Grande (d) 528
Cuyama River below Twitchell Dam (dc) 529
  Sisquoc River near Sisquoc (dc) 531
    Tepusquet Creek near Sisquoc (d) 533
  Sisquoc River near Garey (d) 534
Santa Maria River at Guadalupe (d) 535

WATER RESOURCES DATA FOR CALIFORNIA, 1979

Volume 1

INTRODUCTION

Water-resources data for the 1979 water year for California consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and records of water levels in selected observation wells. Records for a few pertinent streamflow and water-quality stations in bordering States are also included. These data, a contribution to the National Water Data System, were collected by the Geological Survey and cooperating local, State, and Federal agencies in California.

Records of discharge or stage of streams and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface-Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled, "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, Virginia 22202.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released, either in separate reports or in conjunction with streamflow records. Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published together as an official Survey report on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report CA-79-1." For archiving and general distribution, the reports for water years 1971-74 are also identified as water-data reports. Water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161.

COOPERATION

The U.S. Geological Survey and organizations of the State of California have had cooperative agreements for the systematic collection of records since 1903. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Antelope Valley-East Kern Water Agency, Wallace G. Spinarski, General Manager.
California Department of Boating and Waterways, Marty Mercado, Director.
California Department of Water Resources, R. B. Robie, Director.
California Regional Water Quality Control Board, Lahontan Region, Roy C. Hampson, Executive Officer.
Carpinteria County Water District, Robert Lieberknecht, Manager.
Casitas Municipal Water District, Robert N. McKinney, General Manager-Chief Engineer.
Coachella Valley County Water District, L. O. Weeks, General Manager-Chief Engineer.
Crestline-Lake Arrowhead Water Agency, Robert M. Massey, General Manager.
Desert Water Agency, P. G. Payne, General Manager.
Goleta County Water District, Robert A. Paul, General Manager-Chief Engineer.
Imperial County Department of Public Works, David E. Pierson, Director.
Imperial Irrigation District, Donald A. Twogood, General Manager.
Indian Wells Valley County Water District, David Hamilton, General Manager.
Los Angeles County Flood Control District, A. E. Bruington, Chief-Engineer.
Los Angeles Department of Water and Power, Duane L. Georgeson, Engineer, Los Angeles Aqueduct Division.
Montecito County Water District, Charles Evans, General Manager-Chief Engineer.
Orange County Environmental Management Agency, H. G. Osborne, Director.
Orange County Water District, Neil M. Cline, Secretary-Manager.
Riverside County Flood Control and Water Conservation District, Ken Edwards, Chief Engineer.
San Bernardino Valley Municipal Water District, J. A. Beaver, General Manager.
San Diego, City of, Water Utilities, R. W. King, Director.
San Diego County Department of Sanitation and Flood Control, C. J. Houson, Director.
Santa Barbara, City of, Department of Public Works, R. W. Puddicombe, Director.
Santa Barbara County Flood Control and Water Conservation District, James M. Stubchaer, Flood-Control Engineer.
Santa Barbara County Water Agency, Harrell Fletcher, Board of Directors Chairman.
Santa Maria Valley Water Conservation District, M. F. Twitchell, Secretary.
United Water Conservation District, R. A. Smith, General Manager-Chief Engineer.
Ventura County Flood Control District, Arthur Goulet, Director.
Western Municipal Water District, H. A. Hicks, General Manager.

Assistance in the form of funds or services was given by Environmental Protection Agency; U.S. International Boundary and Water Commission; Corps of Engineers, U.S. Army; U.S. Navy; Bureau of Indian Affairs, National Park Service, and Water and Power Resources Service, U.S. Department of the Interior.

The following organizations aided in collecting records: Big Bear Municipal Water District; cities of Long Beach, San Bernardino, and San Diego; Escondido Mutual Water Co.; Fallbrook Public Utility District; Fontana Union Water Co.; Lake Hemet Municipal Water District; Metropolitan Water District of Southern California; Santa Paula Water Works, Ltd; Sweetwater Authority of South Bay Irrigation District; Southern California Edison Co.; Temescal Water Co.; and White Water Mutual Water Co.

HYDROLOGIC CONDITIONS

Runoff during the 1979 water year in the area covered by this volume was above normal for the entire year. Total runoff at selected sites in California is shown in figure 1. Runoff in the Santa Ana River basin and coastal basins to the south was 213 percent of the median; in the Santa Clara River basin, 324 percent of the median; and in the desert areas it was above normal for much of the year.

Two storms in November left 2-3 inches (51-76 mm) of rain, but resulted in little runoff and no significant peaks. A violent tropical storm hit most of southern California December 16-19 with rain, snow, hail, lightning, waterspouts, and tornados; however, it caused only moderate runoff and no major damage. Heavy precipitation from a cold-front storm on January 5-6 caused landslides in Los Angeles and Orange Counties. Six inches (152 mm) of snow fell in Antelope Valley, a rare occurence. Some stations in the Laguna Niguel area of Orange County reported record flows.

The southern California coastal area was hit by another intense tropical rainstorm on January 31 and February 1. Twisters touched down in several places, and major flooding resulted from coastal canyon storm flows. San Diego County's rainfall total was 5 inches (127 mm) above normal, and two deaths were attributed to floodflows there.

Major frontal storms during March 16-17 and March 26-28 produced significant runoff in Los Angeles, Orange, and San Diego Counties and annual maximum flows at some stations in Santa Barbara and Ventura Counties.

As much as 6 inches (152 mm) of rain fell on some sections of the San Jacinto mountains, and desert communities were hit by flash floods as a result of a fierce storm on July 20. Damage to more than 500 homes in the Palm Springs area by mudslides and flood water was estimated at fifty million dollars. On August 17-18, a tropical storm dropped another 0.5 inch (13 mm) of rain on Palm Springs and brought the seasonal total almost to 10.85 inches (276-mm), the record total of 1929. In Barstow 2 inches (51 mm) of rain fell in one hour, and a tornado-like wind destroyed two houses in the tiny settlement of Springcrest.

The quality of surface water changed little throughout the water year. In some basins in southern California, ground-water levels rose in response to above average rainfall during the winter of 1978-79. In other basins, heavy use of ground water continued to lower the water tables.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, ground-water, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound units to International System units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multicelled plants, containing chlorophyll and lacking roots, stems, and leaves.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by a well. A flowing artesian well is one in which the water level is above the land surface.

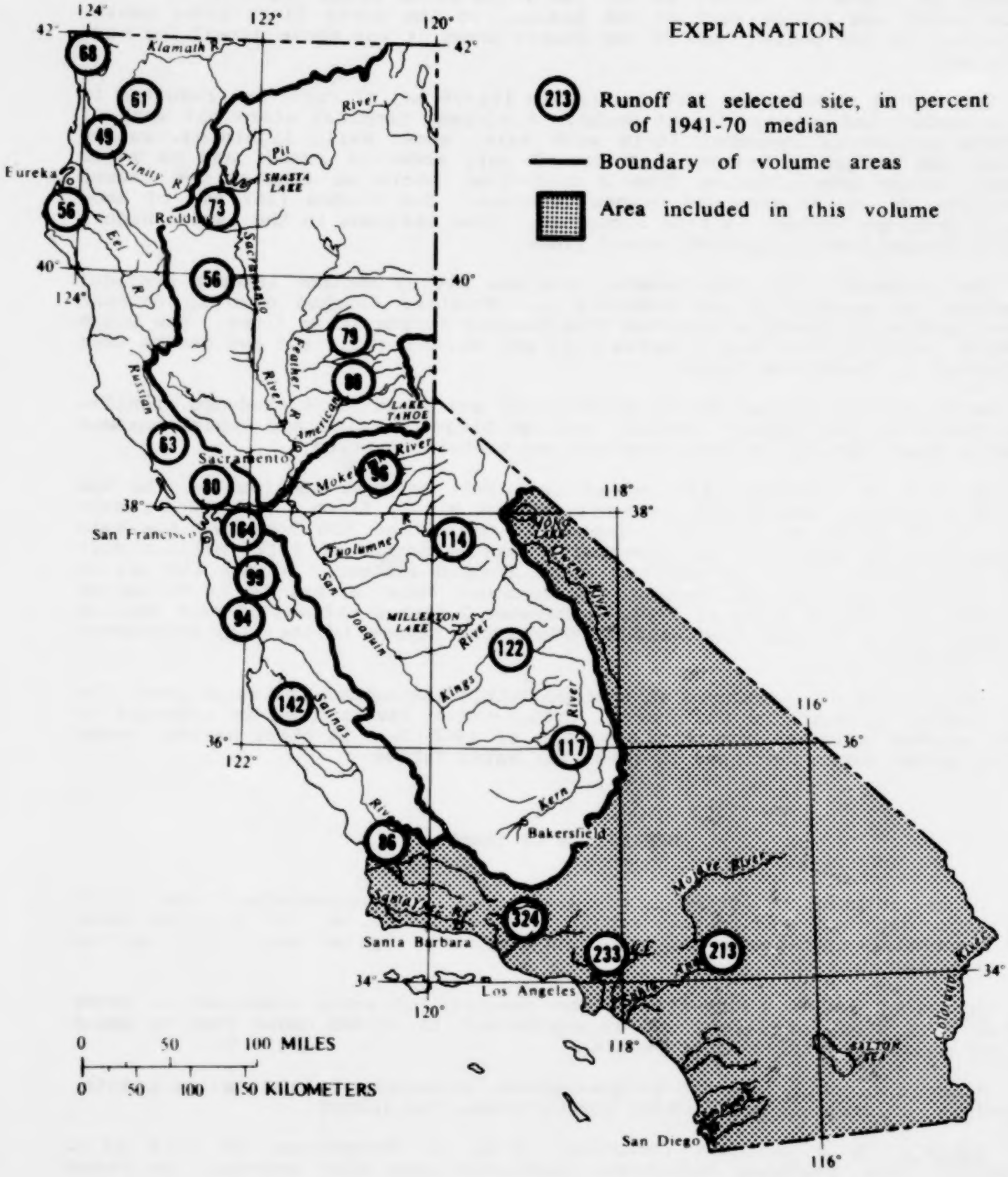

EXPLANATION
213 Runoff at selected site, in percent of 1941-70 median
Boundary of volume areas
Area included in this volume
124°
122°
120°
118°
116°
42°
40°
38°
36°
34°
Klamath R
River
Pit
SHASTA LAKE
Trinity R
Eureka
Redding
Eel R
Sacramento River
Feather R
American
LAKE TAHOE
Russian
Sacramento
Mokelumne River
San Francisco
Tuolumne R
San Joaquin River
MILLERTON LAKE
Kings River
Salinas River
Kern River
Bakersfield
MONO LAKE
Owens River
Mojave River
Santa Ynez R
Santa Barbara
Los Angeles
Santa Ana R
SALTON SEA
Colorado River
San Diego
68
61
49
56
73
56
79
80
63
80
96
164
114
99
94
122
142
117
86
324
233
213
0 50 100 MILES
0 50 100 150 KILOMETERS

FIGURE 1.--Runoff for the current water year.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials, for example, decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. For the membrane filter method these bacteria are defined as the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 0.5°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. For the membrane filter method they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. For the membrane filter method they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 0.5°C on KF Streptococcus agar (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Benthic organisms (invertebrates) are the group of animals living in or on the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Cells/volume refers to the number of cells of any organism that are counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually in milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons or 2,445 cubic meters. It represents a runoff of approximately 0.0372 inch from 1 square mile or 0.3468 millimeter from 1 square kilometer.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic foot per second (FT^3/S, ft^3/s), is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, total fluids plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved is that material in a representative water sample which passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate. It is recognized that certain kinds of samples cannot be filtered; to provide for this, procedures that are considered equivalent to filtering through a 0.45-micrometer membrane filter will be identified and announced a later date.

Diversity index is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = \sum_{i=i}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n} ,$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the samples are the same, to some positive number, when some or all the organisms in the sample are different.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given therein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the Earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap that is required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation

$$I = I_o e^{-\lambda L},$$

where I_o is the source light intensity, I is the light intensity at length L (in meters) from the source, λ is the light-attenuation coefficient, and e is the base of the natural logarithm. The light-attenuation coefficient is defined as

$$\lambda = -\frac{1}{L} \log_e \frac{I}{I_o}.$$

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that are usually arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This development process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-pupa-adult or egg-nymph-adult.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per gram (UG/G, µg/g) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Nekton are the consumers in the aquatic environment and consist of large free-swimming organisms that are capable of sustained, directed mobility.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per unit area of the habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a site where limited streamflow data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in chemically dispersed distilled water.

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024-0.004	Sedimentation
Silt..........	0.004-0.062	Sedimentation
Sand..........	0.062-2.0	Sedimentation or sieve
Gravel........	2.0-64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water.

Percent composition or percent of total is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, or volume.

Periphyton are microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, the periphyton also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton are suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton compose the plant part of the plankton. They are usually microscopic and their movement is subject to water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and are commonly known as algae.

Blue-green algae are phytoplankton organisms having a blue pigment in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Phytoplankton (continued)

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/mL of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells/mL of sample.

Zooplankton compose the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms, chiefly green plants. The rate of primary production is estimated by measuring the amount of carbon assimilated by plants (carbon method) or the amount of oxygen released (oxygen method).

Milligrams of carbon per area or volume per unit time [mg $C/(m^2.time)$ for periphyton and macrophytes and mg $C/(m^3.time)$ for phytoplankton] are the units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light- and dark-bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg $O^2/(m^2.time)$ for periphyton and macrophytes and mg $O^2/(m^3.time)$ for phytoplankton] are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light- and dark-bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Sediment is solid material that is derived mostly from disintegrated rocks and is transformed by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Bedload is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bedload is considered to consist of particles in transit within 0.25 ft (0.076 m) of the streambed.

Bedload discharge (tons per day) is the quantity of sediment, as measured by dry weight, that moves past a section as bedload in a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft or 0.09 m above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons per day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or volume, that passes a section in a given time. It is computed by multiplying discharge times milligrams per liter times 0.0027.

Suspended-sediment load (tons per day) is the quantity of suspended sediment passing a section in a specified period.

Total-sediment discharge or total-sediment load (tons per day) is the sum of suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight, that passes a section in a given time.

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids concentration in water. Commonly, dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and the volume of water, per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff." Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Natural substrate refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic-organism collection and plexiglass strips for periphyton collection.

Surface area of a lake is the area, in square miles or acres, outlined on the latest Geological Survey topographic map as the boundary of the lake and measured by a planimeter. In localities not covered by topographic maps, the areas are computed from the best maps available. Areas shown are for the lake stage at the time the map was made.

Surficial bed material is the part (upper 0.1 to 0.2 ft or 0.03 to 0.06 m) of the bed material that is sampled by using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) the material retained on a 0.45-micrometer filter.

> Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.
>
> Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.
>
> Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."
>
> Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	Hexagenia
Species	limbata

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the presence of a thermograph or a digital mechanism that records water temperature in a digital format on punched paper tape.

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day (T/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Total load (tons) is the total amount of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Turbidity of a sample is the reduction of transparency due to the presence of particulate matter. In this report it is expressed in Nephelometric turbidity units (NTU) or Jackson turbidity units (JTU), obtained from the Nephelometric method for turbidity determination which measures the intensity of light scattered by suspended particles at 90 degrees from the path of an incident light source (see also p. 23).

WDR is used as an abbreviation for "Water-Data Reports" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports.

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first-rank, second-rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention shows which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each surface-water station, water-quality station, and partial-record station has been assigned a station number. These are in the same downstream order as used in this report. In assigning station numbers, no distinction is made between partial-record and continuous-record stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left between the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 11105850, which appears just to the left of the station name, includes the 2-digit number "11" plus the 6-digit downstream order number "105850". In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records for California are in Part 9 (Colorado River basin), Part 10 (The Great Basin), and Part 11 (Pacific slope basins in California). All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit downstream-order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well- and miscellaneous-site number system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells or other sites within a 1-second grid. See figure 2.

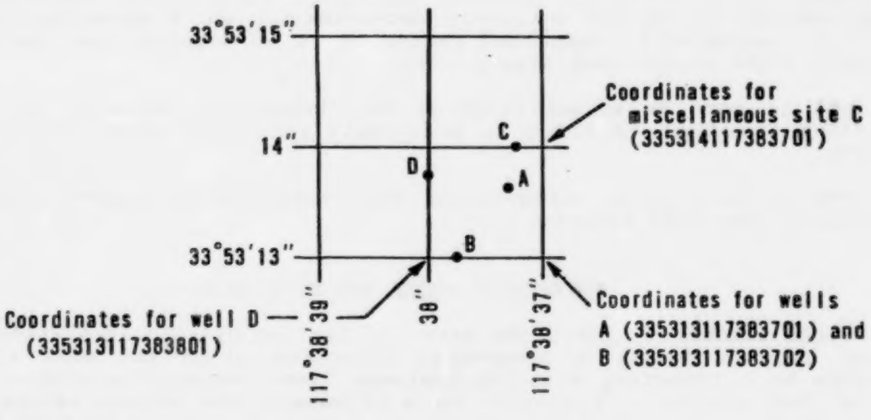

33°53'15"
Coordinates for miscellaneous site C (335314117383701)
C
14"
D
A
B
33°53'13"
Coordinates for well D — (335313117383801)
117°38'39"
38"
117°38'37"
Coordinates for wells A (335313117383701) and B (335313117383702)

Figure 2.--System for numbering wells and miscellaneous sites (latitude and longitude).

Local well numbers

Wells and springs in California are assigned numbers according to their location on the rectangular system for the subdivision of public land. For example, in the number 005S/010E-22G01 M, the part of the number preceding the slash indicates the township (T.5 S.) and the number between the slash and hyphen indicates the range (R.10 E.); the digits following the hyphen indicate the section (sec.22); the letter following the section number indicates the 40-acre subdivision of the section. Within each 40-acre tract, the wells are numbered serially, as indicated by the final digit. The final letter, separated from the rest of the number by a space, indicates the base line and meridian. Base-line and meridian designations are as follows: H, Humboldt; M, Mount Diablo; S, San Bernardino. See figure 3.

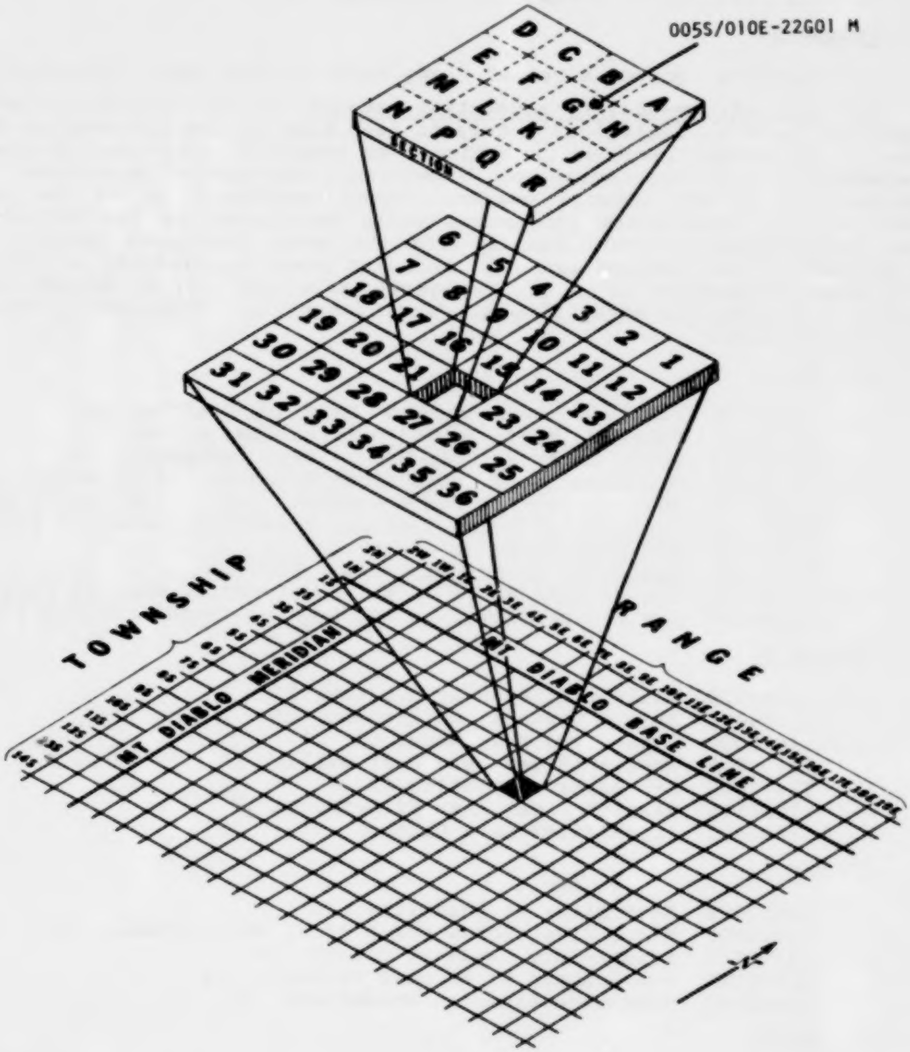

005S/010E-22G01 M
D
C
B
A
E
F
G
H
M
L
K
J
N
P
Q
R
SECTION
6
5
4
3
2
1
7
8
9
10
11
12
18
17
16
15
14
13
19
20
21
22
23
24
30
29
28
27
26
25
31
32
33
34
35
36
TOWNSHIP
RANGE
MT. DIABLO MERIDIAN
MT. DIABLO BASE LINE
N

FIGURE 3.--California well-numbering system.

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped basin. Stations in this network are listed below:

Volume 2:

11475560	Elder Creek near Branscomb, CA

Volume 3:

11264500	Merced River at Happy Isles Bridge, near Yosemite, CA

National stream-quality accounting network is an accounting network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on the river-basin accounting units designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality. Stations in this network are listed below:

Volume 1:

09424190	Colorado River Aqueduct near San Jacinto, CA
09429500	Colorado River above Imperial Dam, AZ-CA
10254670	Alamo River at Drop No. 3, near Calipatria, CA
10254970	New River at International Boundary, at Calexico, CA
10261500	Mojave River at lower narrows, near Victorville, CA
10277400	Owens River below Tinemaha Reservoir, near Big Pine, CA
11042000	San Luis River at Oceanside, CA
11074000	Santa Ana River below Prado Dam, CA
11103010	Los Angeles River at Willow Street Bridge, at Long Beach, CA
11108500	Santa Clara River at Los Angeles-Ventura County line, CA

Volume 2:

11152300	Salinas River near Chualar, CA
11159000	Pajaro River at Chittenden, CA
11458000	Napa River near Napa, CA
11467000	Russian River near Guerneville, CA
11477000	Eel River at Scotia, CA
11530500	Klamath River near Klamath, CA
11532500	Smith River near Crescent City, CA

Volume 3:

11187000	Kern River at Kernville, CA
11218500	Kings River below North Fork, near Trimmer, CA
11250000	Friant-Kern Canal at Friant, CA
11303500	San Joaquin River near Vernalis, CA
11325500	Mokelumne River at Woodbridge, CA

Volume 4:

10356500	Susan River at Susanville, CA
11370500	Sacramento River at Keswick, CA
11447650	Sacramento River at Freeport, CA

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radiosotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams and canals, and stage and contents of lakes and reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in the U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For a stream-gaging station, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise, daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current year is shown on the reverse side of the front cover to facilitate finding the day of the week for any date.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of published records. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATIONS" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published, along with the current records, in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge are affected by the revision, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the daily minimum was revised; and "(P)" that only the peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given.

The type of gage currently in use, the datum of the present gage referred to National Geodetic Vertical Datum of 1929, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page 8.

Information pertaining to the accuracy of the discharge records, and to conditions that affect the natural flow at the gaging station, is given under "REMARKS"; for reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is also given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance.

Under "EXTREMES" are given: First, the extremes for the period of record; second, information available outside the period of record; and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the daily minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks (including the maximum for the year) above the selected base, with the time of occurrence and corresponding gage heights, are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

Skeleton rating tables are published, immediately following EXTREMES, for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in acre-feet (line headed "AC-FT"). In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharges are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but it is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of field data and computed results

The accuracy of discharge data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measure ments of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumptive use, regulation by storage, increase or decrease due to artificial causes, or to other factors. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other data available

Information of a more detailed nature than that published for most of the gaging stations, such as observations of water temperatures, discharge measurements, gage-height records, and rating tables, is on file in the District Office. Also, most gaging-station records are available in computer-usable form and many statistical analyses have been made. Information on the availability of unpublished data or statistical analyses may be obtained from the District Office.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the District Office.

Records of discharge collected by agencies other than the Geological Survey

Records of discharge not published by the Geological Survey have been collected at numerous sites by many other Federal, State, County, City, and local agencies and by private organizations. A listing of stream-gaging stations and the agencies cperating them is published in California Department of Water Resources Bulletin 230-78, "Index to Sources of Hydrologic Data." The National Water Data Exchange, Water Resources Division, U.S. Geological Survey, National Center, Reston, VA 22092, maintains an index of such sites. Information on records at specific sites can be obtained upon request.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Surface-water samples for analyses usually are collected at or near gaging stations. The water-quality records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, pH, dissolved oxygen, water temperature, sediment discharge, etc.); instrumentation; general remarks; extremes for the period of daily record; and extremes for the current year.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, date of sampling and/or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations, listed on a following page.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between the reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between time of measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the District Office.

Ground-water quality normally does not change significantly during short periods of time; infrequent sampling and analysis of ground water adequately defines ground-water quality at a given site.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diel temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where continuously recording thermographs are present, the records consist of maximum and minimum temperatures for each day and month. Water temperatures taken at the time of discharge measurements are on file in the district office. They will be used, with all other temperature data, for reports such as the open-file reports by subregion, "Water Temperature of California Streams, 1970."

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration at the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge was computed by the subdivided-day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, estimates of bedload and total-sediment discharge are included for some stations. Also included are particle-size distribution analyses of suspended sediment, surface bed material, and bedload material (sediment in transit within 0.25 ft (0.076 m) of the bed).

Computations of monthly bedload discharges are based on the relation between instantaneous water discharge and corresponding bedload discharge for the station. Values of bedload discharge used in defining this relation are based on samples obtained by use of the Helley-Smith bedload sampler or by modified-Einstein or Meyer-Peter Muller computation procedures. Application of the bedload-transport relation at a station was made on a daily basis or subdivided-day basis.

The Helley-Smith sampler is designed to collect a time-weighted sample of the sediment moving within 0.25 ft (0.076 m) of the streambed. Sediment moving in this portion of the flow cannot be sampled with standard suspended-sediment samplers. It is assumed that samples obtained by this sampler represent the bedload discharge when used in coarse-material bedded streams (median diameter coarser than about 4 mm) and that these data can be used in conjunction with theoretical computations to define the bedload-transport relation for a station.

Calibration of the Helley-Smith sampler has not been completed, and a trap efficiency of 1.0 has been assumed applicable to this device. Error sources in the theoretical methods, based on analysis of bed-material characteristics, channel geometry, and associated hydraulic factors, are also undefined. In consequence, figures of bedload discharge must be used with caution. They are estimates, at best, and are subject to revision.

Turbidity

At some stations samples for the determination of turbidity were collected at the same frequency as samples collected for determination of suspended sediment. Turbidity, measured in Nephelometric turbidity units (NTU), is shown in relation to the concentration of sediment in the simultaneously collected sample.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water-level data from a basic national network of observation wells are published herein. These water-level measurements are intended to provide a sampling and historical record of water-level changes in the Nation's most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on the grid system of latitude and longitude as shown in figure 2, and (2) a local number that is provided for continuity with older reports and for other use as dictated by local needs (fig. 3).

Measurements are made in many types of wells under various conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well insure that measurements at a well are of consistent accuracy and reliability.

Water-level measurements in this report are given in feet with reference to either National Geodetic Vertical Datum of 1929 (NGVD) or land-surface datum (lsd). National Geodetic Vertical Datum is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum referred to National Geodetic Vertical Datum is given in the well description. The height of the measuring point (MP above or below land-surface datum), if known, is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (EOM).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

PUBLICATIONS OF TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please specify the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

1-D1. Water temperature-influential factors, field measurement, and data presentation, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. Guidelines for collection and field analysis of ground-water samples for selected unstable constituents, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. Application of surface geophysics to ground-water investigations, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. Application of borehole geophysics to water-resources investigations, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. General field and office procedures for indirect discharge measurements, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. Measurement of peak discharge by the slope-area method, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. Measurement of peak discharge at culverts by indirect methods, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3, 1968. 60 pages.

3-A4. Measurement of peak discharge at width contractions by indirect methods, By H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5, 1967. 29 pages.

3-A6. General procedure for gaging streams, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6, 1968. 13 pages.

3-A7. Stage measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. Discharge measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A11. Measurement of discharge by moving-boat method, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-B1. Aquifer-test design, observation, and data analyses, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. Introduction to ground-water hydraulics, a programed text for self-instruction, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-C1. Fluvial sediment concepts, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. Field methods for measurement of fluvial sediment, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2, 1970. 59 pages.

3-C3. Computation of fluvial-sediment discharge, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. Some statistical tools in hydrology, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. Frequency curves, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. Low-flow investigations, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. Storage analyses for water supply, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. Regional analyses of streamflow characteristics, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. Computation of rate and volume of stream depletion by wells, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. Methods for determination of inorganic substances in water and fluvial sediments, edited by M. W. Skougstad, M. J. Fishman, L. C. Friedman, D. E. Erdmann, and S. S. Duncan: USGS--TWRI Book 5, Chapter A1. 626 p.

5-A2. Determination of minor elements in water by emission spectroscopy, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. Methods for analysis of organic substances in water, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. Methods for collection and analysis of aquatic biological and microbiological samples, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. Methods for determination of radioactive substances in water and fluvial sediments, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-C1. Laboratory theory and methods for sediment analyses, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. Finite-difference model for aquifer simulation in two dimensions with results of numerical experiments, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. Computer model of two-dimensional solute transport and dispersion in ground water, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

8-A1. Methods of measuring water levels in deep wells, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.

8-B2. Calibration and maintenance of vertical-axis type current meters, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV
(National stream-quality accounting network station)

LOCATION.--Lat 36°00'55", long 114°44'16", in NE¼SW¼ sec.3, T.30 N., R.23 W., Gila and Salt River meridian, or SW¼NE¼ sec.29, T.22 S., R.65 E., Mount Diablo meridian, Mohave-Clark Counties, Hydrologic Unit 15030101, in powerhouse at downstream side of Hoover Dam.

DRAINAGE AREA.--171,700 mi² (444,700 km²), approximately, including 3,959 mi² (10,254 km²) in Great Divide basin in southern Wyoming, which is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1933 to current year (prior to April 1934, monthly discharge only, published in WSP 1313). Published as "near Willow Beach" 1933-39 and as "below Boulder Dam" 1939-45.

GAGE.--Totalizing flowmeters on each turbine in Hoover Dam powerhouse. Prior to Nov. 1, 1939, water-stage recorder at site 9 mi (14 km) downstream at datum 594.8 ft (181.30 m) National Geodetic Vertical Datum of 1929. Nov. 1, 1939, to June 30, 1950, water-stage recorder at site 0.8 mi (1.3 km) downstream at datum 600.35 ft (182.987 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Flow regulated by Lake Mead since Feb. 1, 1935. Many diversions above station for irrigation, industrial, and municipal use.

COOPERATION.--Records furnished by Bureau of Reclamation.

AVERAGE DISCHARGE.--45 years (water years 1935-79), 13,140 ft³/s (372.1 m³/s), 9,520,000 acre-ft/yr (11,700 hm³/yr), unadjusted for storage in Lake Mead.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 36,000 ft³/s (1,020 m³/s) Jan. 28, 1942; no flow at Hoover Dam part of Feb. 10, 1935; minimum daily, 152 ft³/s (4.30 m³/s) Feb. 10, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 25,900 ft³/s (733 m³/s) May 22, 25; minimum daily, 587 ft³/s (16.6 m³/s) Apr. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4390	8710	7260	2570	3960	14400	2680	18500	17600	5860	15000	5990
2	10200	8060	4390	4280	5490	12500	13000	15800	9320	13400	18400	5880
3	12000	6800	5020	2720	5630	5440	14300	18500	9500	17500	16600	9690
4	12300	1770	7520	2490	3700	3840	12300	16500	16800	4140	10500	15100
5	10100	4330	9920	4270	3760	12800	11800	8190	17500	15500	12900	13700
6	12800	9820	13900	2790	2620	12900	7590	6960	18100	14100	18900	14200
7	6880	9850	13300	1250	1120	12300	3950	17200	14500	7820	19500	15600
8	3380	8350	13800	2930	2090	14800	2070	16000	18200	11100	17300	20400
9	7220	5000	8300	2930	1640	13000	13200	14700	7700	15700	19400	20300
10	8070	2910	3210	2250	1490	3620	10000	18200	18600	13700	16600	14900
11	11000	4850	7540	1350	1180	2240	14100	20600	16800	15000	7460	13800
12	11400	3100	10100	2200	1440	13500	17400	12800	16400	14800	5900	15100
13	11500	7330	7900	1180	1270	15400	15800	11000	16400	14800	12800	16700
14	5610	7150	8920	2130	1640	13600	5150	19800	16300	10600	12800	18100
15	3190	9170	9680	2230	2960	14300	587	18500	17100	9100	18500	12000
16	10300	6960	5500	4060	2280	14300	13100	17900	6830	12600	15100	8490
17	11800	7680	4180	3840	1330	5880	13700	18000	4670	14700	13200	16800
18	7900	3010	4640	5030	1670	3200	16800	22000	16600	16900	8610	14500
19	10600	2720	3440	5840	4820	15300	18100	11100	16400	14400	6610	16800
20	9760	7480	4620	1670	12200	12600	17400	7570	17900	16900	14400	18500
21	4510	9730	4760	1660	13300	14400	9070	22400	17500	8280	14400	8420
22	5400	7890	3820	3410	12400	11400	3800	25900	20000	10800	15700	6220
23	10800	2190	1430	3120	12400	11400	16600	25500	11900	18900	16900	9020
24	8060	3960	1180	6250	3980	4060	16300	25500	7420	19900	19600	8110
25	8930	2420	1690	5360	1820	843	15600	25900	16900	18800	12800	9090
26	8840	4760	2530	5760	10400	10200	16400	13200	15100	16400	11200	9880
27	5320	6630	4520	2900	14600	12600	17500	6140	17400	19800	12900	6960
28	3810	7380	4790	6120	15700	9900	7960	7920	17000	14700	13400	10400
29	2740	10300	3720	5880	---	9120	7320	18400	20800	13400	15400	5800
30	6970	9190	1830	8720	---	11200	21000	14200	10800	15600	19200	6340
31	7330	---	2050	4160	---	2240	---	14600	---	16800	18400	---
TOTAL	253110	189220	185460	109750	146890	311583	354577	509480	436240	432400	441580	354390
MEAN	8165	6307	5983	3540	5246	10050	11820	16430	14540	13950	14240	11810
MAX	12800	10300	13900	8720	15700	15400	21000	25900	20800	19900	19600	20400
MIN	2740	1770	1180	1180	1120	843	587	6140	4670	4140	5900	5800
AC-FT	502000	375300	367900	217700	291400	618000	703300	1011000	865300	857700	875900	702900

CAL YR 1978 TOTAL 3769340 MEAN 10330 MAX 22300 MIN 1180 AC-FT 7476000
WTR YR 1979 TOTAL 3724680 MEAN 10200 MAX 25900 MIN 587 AC-FT 7388000

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV--Continued

WATER-QUALITY RECORDS

LOCATION.--Lat 36°00'38", long 114°44'31", in SW¼SW¼ sec.3, T.30 N., R.23 W., Gila and Salt River meridian, Mohave County, Ariz., or in SW¼SE¼ sec.29, T.22 S., R.65 E., Mount Diablo meridian, Clark County, Nev., 0.3 mi (0.5 km) downstream from gaging station in powerhouse at downstream side of Hoover Dam.

DRAINAGE AREA.--171,800 mi² (445,000 km²), approximately, including 3,959 mi² (10,254 km²) in Great Divide basin in southern Wyoming which is noncontributing (previously considered part of the Missouri River basin).

PERIOD OF RECORD.--October 1939 to September 1962, October 1963 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1941 to September 1957.

REMARKS.--Unpublished chemical analyses for period October 1939 to September 1940, available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT										
17...	0800	8000	1070	8.3	13.0	.40	7.2	14	--	--
18...	0800	8530	--	--	13.5	--	--	--	1	1
NOV										
14...	0800	12700	1070	8.0	12.5	.60	7.0	11	--	--
15...	0800	16000	--	--	12.5	--	--	--	33	3
DEC										
05...	0800	9590	1080	7.6	12.5	.10	6.5	10	--	--
06...	0800	22800	--	--	12.5	--	--	--	1	1
JAN										
09...	0830	4990	1090	7.6	12.0	.30	--	11	--	--
10...	0830	2270	--	--	12.5	--	--	--	--	--
FEB										
13...	0800	577	1120	7.8	11.5	.70	11.0	29	--	--
14...	0850	2320	--	--	12.5	--	--	--	1	1
MAR										
13...	0800	14300	1090	7.6	12.0	1.4	9.8	10	--	--
14...	0850	14500	--	--	12.0	--	--	--	1	57
APR										
10...	0800	12300	1110	7.8	10.5	1.1	10.3	10	--	--
11...	0800	10700	--	--	11.0	--	--	--	1	23
MAY										
08...	0900	19700	1100	7.6	11.0	--	9.0	13	--	--
09...	0830	18700	--	--	11.0	--	--	--	1	24
JUN										
12...	0830	10400	1100	7.8	11.0	.30	8.6	13	--	--
13...	0830	10400	--	--	11.0	--	--	--	1	1
JUL										
10...	0800	8120	1150	8.1	12.0	.20	8.6	9	--	--
11...	0800	10300	--	--	12.0	--	--	--	1	1
AUG										
07...	0800	10800	1110	7.6	12.0	.60	7.7	10	--	--
SEP										
11...	0800	7950	1120	7.8	11.5	.40	8.1	11	--	--
12...	0800	5620	--	--	11.5	--	--	--	0	0

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	SODIUM+POTAS-SIUM DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)
OCT										
17...	340	210	89	28	100	39	2.4	--	4.6	130
18...	--	--	--	--	--	--	--	--	--	--
NOV										
14...	350	220	94	29	99	37	2.3	--	4.7	130
15...	--	--	--	--	--	--	--	--	--	--
DEC										
05...	330	200	86	29	100	39	2.4	--	5.3	130
06...	--	--	--	--	--	--	--	--	--	--
JAN										
09...	320	220	79	29	100	40	2.4	--	5.3	100
10...	--	--	--	--	--	--	--	--	--	--
FEB										
13...	340	220	86	31	110	41	2.6	--	5.2	120
14...	--	--	--	--	--	--	--	--	--	--
MAR										
13...	340	220	85	31	100	39	2.4	--	4.6	120
14...	--	--	--	--	--	--	--	--	--	--
APR										
10...	330	200	82	30	100	39	2.4	--	4.5	130
11...	--	--	--	--	--	--	--	--	--	--
MAY										
08...	--	--	83	--	--	--	--	--	--	120
09...	--	--	--	--	--	--	--	--	--	--
JUN										
12...	350	230	90	30	110	40	2.6	120	4.9	120
13...	--	--	--	--	--	--	--	--	--	--
JUL										
10...	350	220	89	30	99	38	2.3	100	5.1	130
11...	--	--	--	--	--	--	--	--	--	--
AUG										
07...	330	200	81	30	110	42	2.7	120	5.1	130
SEP										
11...	320	190	80	28	100	40	2.5	110	4.9	130
12...	--	--	--	--	--	--	--	--	--	--

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT									
17...	290	84	.4	8.9	714	685	.41	.41	.01
18...	--	--	--	--	--	--	--	--	--
NOV									
14...	290	90	.3	9.1	716	696	.42	.42	.02
15...	--	--	--	--	--	--	--	--	--
DEC									
05...	300	96	.3	9.2	711	--	.41	.41	.01
06...	--	--	--	--	--	--	--	--	--
JAN									
09...	290	96	.3	9.1	716	670	.35	.33	.00
10...	--	--	--	--	--	--	--	--	--
FEB									
13...	290	98	.3	9.2	739	704	.32	.32	.02
14...	--	--	--	--	--	--	--	--	--
MAR									
13...	290	94	.4	8.6	718	687	.36	.36	.02
14...	--	--	--	--	--	--	--	--	--
APR									
10...	290	85	.3	9.2	707	681	.33	.28	.03
11...	--	--	--	--	--	--	--	--	--
MAY									
08...	300	85	.3	--	725	--	--	.31	--
09...	--	--	--	--	--	--	--	--	--
JUN									
12...	300	88	.4	7.8	732	705	.39	.39	.01
13...	--	--	--	--	--	--	--	--	--
JUL									
10...	310	88	.4	8.5	760	710	.37	.37	.03
11...	--	--	--	--	--	--	--	--	--
AUG									
07...	310	86	.9	8.4	720	712	.37	.38	.01
SEP									
11...	300	86	.4	8.8	727	680	.40	.39	.03
12...	--	--	--	--	--	--	--	--	--

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT									
17...	.27	.28	.00	.50	.69	--	.020	.020	.01
18...	--	--	--	--	--	--	--	--	--
NOV									
14...	.13	.15	.00	.16	.57	--	.020	.020	.01
15...	--	--	--	--	--	--	--	--	--
DEC									
05...	.38	.39	.00	.76	.80	--	.020	.020	.00
06...	--	--	--	--	--	--	--	--	--
JAN									
09...	.23	.23	.00	.90	.58	--	.020	.020	--
10...	--	--	--	--	--	--	--	--	--
FEB									
13...	.21	.23	.00	.34	.55	--	.030	.020	.03
14...	--	--	--	--	--	--	--	--	--
MAR									
13...	.29	.31	.00	.62	.67	--	.010	.010	.01
14...	--	--	--	--	--	--	--	--	--
APR									
10...	.34	.37	.00	.82	.78	--	.010	.020	.04
11...	--	--	--	--	--	--	--	--	--
MAY									
08...	--	--	--	--	--	--	--	--	.01
09...	--	--	--	--	--	--	--	--	--
JUN									
12...	.21	.22	.00	.26	.65	.65	.040	.040	.00
13...	--	--	--	--	--	--	--	--	--
JUL									
10...	.73	.76	.39	.37	1.1	.74	.020	.010	.03
11...	--	--	--	--	--	--	--	--	--
AUG									
07...	.32	.33	.04	.29	.70	.67	.030	.040	.00
SEP									
11...	.57	.60	.16	.44	1.0	.83	.020	.020	.01
12...	--	--	--	--	--	--	--	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
NOV											
14...	0800	4	3	200	200	0	200	150	--	--	--
FEB											
13...	0800	3	3	100	0	100	210	150	1	1	0
MAY											
08...	0800	3	3	100	0	100	220	150	1	0	1
AUG											
07...	0800	4	4	100	0	100	160	180	0	0	<1

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
NOV										
14...	0	0	0	0	0	0	3	1	2	40
FEB										
13...	0	0	0	0	0	0	5	4	1	0
MAY										
08...	0	0	0	0	0	<3	7	3	0	30
AUG										
07...	0	0	0	0	0	<3	5	3	2	60

< Actual value is known to be less than the value shown.

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)
NOV										
14...	40	0	--	--	--	10	0	10	.1	.1
FEB										
13...	0	0	6	0	6	20	10	10	.0	.0
MAY										
08...	20	10	67	57	10	0	0	1	.3	.3
AUG										
07...	60	0	1	1	0	10	0	<1	.0	.0

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV										
14...	.0	5	0	5	0	0	0	30	20	10
FEB										
13...	.0	3	0	3	0	0	0	20	0	20
MAY										
08...	.0	3	0	3	0	0	0	30	30	4
AUG										
07...	.1	3	0	3	0	0	0	10	7	<3

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT				
17...	0800	2.5	--	--
NOV				
14...	0800	--	2.0	.1
DEC				
05...	0800	3.3	--	--
JAN				
09...	0830	2.8	--	--
FEB				
13...	0800	--	2.8	.1
MAR				
13...	0800	2.9	--	--
APR				
10...	0800	2.5	--	--
MAY				
08...	0800	--	6.4	3.0
JUN				
12...	0830	3.9	--	--
JUL				
10...	0800	3.0	--	--
AUG				
07...	0800	--	2.5	.6
SEP				
11...	0800	2.4	--	--

< Actual value is known to be less than the value shown.

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	NOV 14.78		FEB 13.79		MAY 8.79		JUN 12.79	
TIME	0800		0800		0800		0830	
TOTAL CELLS/ML	140		360		0		0	
DIVERSITY: DIVISION	1.2		0.4		0.0		0.0	
.CLASS	1.2		0.4		0.0		0.0	
..ORDER	1.2		1.2		0.0		0.0	
...FAMILY	1.2		1.3		0.0		0.0	
....GENUS	1.2		1.3		0.0		0.0	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...OOCYSTACEAE								
....OOCYSTIS	--	-	--	-	--	-	--	-
....TETRAEDRON	14	10	8	2	--	-	--	-
...SCENEDESMACEAE								
....SCENEDESMUS	--	-	15	4	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	31	9	--	-	--	-
....MELOSIRA	--	-	--	-	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....COCCONEIS	--	-	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	29#	20	8	2	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	23	6	--	-	--	-
..HORMOGONALES								
...OSCILLATORIACEAE								
....LYNGBYA	100#	70	--	-	--	-	--	-
....OSCILLATORIA	--	-	280#	77	--	-	--	-
....SCHIZOTHRIX	--	-	--	-	--	-	--	-
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...OOCYSTACEAE								
....OOCYSTIS	--	-	55#	40	*	0		
....TETRAEDRON	--	-	--	-	--	-		
...SCENEDESMACEAE								
....SCENEDESMUS	--	-	--	-	--	-		
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	--	-	*	0		
....MELOSIRA	--	-	--	-	7	1		
..PENNALES								
...ACHNANTHACEAE								
....COCCONEIS	--	-	--	-	*	0		
...NAVICULACEAE								
....NAVICULA	--	-	--	-	6	1		
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	90#	37	82#	60	--	-		
..HORMOGONALES								
...OSCILLATORIACEAE								
....LYNGBYA	--	-	--	-	--	-		
....OSCILLATORIA	150#	63	--	-	--	-		
....SCHIZOTHRIX	--	-	--	-	860#	98		

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PERIPHYTON

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M
NOV					
14...	0800	7.65	.040	2.91	2.28
FEB					
13...	0800	92.3	.000	10.6	8.74
MAY					
08...	0800	42.2	.000	11.6	10.2

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	1080	1070	1100	1090	1100	1070	1140	1140	1180	1060
2	---	---	1100	1080	1100	1090	1100	1090	1140	1140	1130	1110
3	---	---	1100	1090	1100	1090	1090	1080	1150	1140	1170	1110
4	---	---	1100	1080	1100	1080	1090	1080	1150	1140	1190	1110
5	---	---	1100	1070	1090	1080	1100	1090	1150	1140	1170	1080
6	---	---	1100	1080	1090	1080	1090	1080	1150	1140	1150	1060
7	---	---	1100	1080	1080	1080	1090	1070	1150	1140	1120	1020
8	---	---	1090	1080	1090	1080	1090	1080	1150	1140	1120	973
9	---	---	1090	1080	1090	1080	1090	1080	1140	1090	1120	1030
10	---	---	1080	1080	1090	1070	1090	1080	1150	1100	1110	1010
11	---	---	1090	1070	1090	1070	1090	1080	1140	1070	1090	1030
12	---	---	1090	1060	1090	1080	1090	1080	1120	1040	1130	1050
13	---	---	1090	1070	1090	1070	1100	1090	1120	1040	1120	1040
14	---	---	1090	1070	1090	1070	1100	1090	1110	1020	1120	1070
15	---	---	1080	1070	1090	1080	1100	1090	1110	1010	1150	1070
16	---	---	1080	1080	1090	1080	1100	1090	1110	981	1140	1050
17	---	---	1090	1080	1090	1070	1100	1080	1110	1050	1120	1040
18	---	---	1090	997	1090	1070	1090	1090	1100	1040	1130	1080
19	---	---	1070	978	1080	1060	1110	1090	1080	1020	1120	1090
20	---	---	1080	994	1090	1070	1110	1100	1120	1050	1120	1100
21	---	---	1080	1010	1090	1050	1110	1090	1120	1100	1110	1010
22	---	---	1080	983	1090	1070	1110	1100	1130	1120	1120	1090
23	---	---	1080	1020	1090	1080	1120	1110	1140	1100	1120	1030
24	---	---	1090	1030	1080	1080	1120	1110	1150	1100	1120	1030
25	---	---	1090	1050	1080	1080	1130	1120	1150	1100	1130	1040
26	1080	1070	1090	1010	1080	1080	1130	1120	1170	1120	1150	1080
27	1080	1070	1080	1010	1090	1070	1130	1120	1150	1110	1120	1070
28	1080	1060	1090	1030	1090	1070	1130	1130	1180	1120	1130	1080
29	1070	991	1090	1060	1090	1080	1130	1120	---	---	1120	1070
30	1060	1000	1100	1060	1080	1070	1140	947	---	---	1090	1010
31	1070	1050	---	---	1080	1070	1140	1140	---	---	1110	1070
MONTH	---	---	1100	978	1100	1050	1140	947	1180	981	1190	973

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1100	999	1100	1080	1110	1100	1090	1070	1090	1090	1090	1070
2	1110	1030	1100	1080	1110	1100	1090	1080	1090	1090	---	---
3	1120	1050	1090	1090	1110	1100	---	---	1100	1080	1090	1080
4	1150	1050	1100	1080	1110	1100	---	---	1090	1080	1090	1080
5	1170	1080	1100	1080	1110	1100	---	---	1090	1080	---	---
6	1140	1090	1100	1080	1110	1100	---	---	1090	1080	1090	1080
7	1110	1080	1100	1080	1110	1100	---	---	1090	1070	1090	1080
8	1110	1070	1100	1090	1110	1100	---	---	1090	1090	1090	1080
9	1100	1050	1090	1080	1110	1100	---	---	1090	1080	1100	1090
10	1100	1080	1100	1080	1110	1100	---	---	1100	1070	1090	1080
11	1100	1040	1100	1090	1110	1100	1090	1070	1090	1060	1090	1080
12	1090	1050	1100	1090	1100	1100	---	---	1090	1080	1090	1080
13	1100	1070	1100	1080	1100	1100	1090	1070	1090	1070	1090	1080
14	1100	1070	1100	1090	1100	1100	1090	1070	1090	1080	1090	1090
15	1100	1050	1100	1090	1110	1100	1090	1070	1090	1060	1090	1080
16	1100	1060	1100	1090	1100	1090	---	---	1090	1070	1090	1080
17	---	---	1100	1090	1100	1090	1090	1090	1090	1070	1090	1080
18	---	---	1100	1090	1100	1090	1090	1080	1090	1070	1090	1080
19	1100	1090	1110	1100	1100	1090	1090	1080	1110	1070	1090	1080
20	---	---	1110	1090	1100	1090	1090	1050	1110	1090	1090	1080
21	1100	1080	1100	1100	1100	1090	1090	1060	1100	1080	1090	1080
22	---	---	1100	1090	1100	1090	1090	1070	1090	1090	1090	1080
23	---	---	1100	1100	1100	1090	1090	1080	1110	1090	1090	1080
24	---	---	1100	1100	1100	1090	1090	1090	1110	1090	1090	1080
25	---	---	1100	1090	1100	1090	1090	1090	1090	1080	1090	1080
26	---	---	1100	1090	1100	1090	1090	1090	1100	1080	1090	1080
27	1090	1080	1100	1100	1090	1090	1100	1090	1090	1090	1090	1080
28	1100	1070	1100	1090	1090	1090	1100	1090	1100	1080	1090	1080
29	1090	1080	1100	1090	1090	1090	1100	1090	1090	1080	1090	1070
30	1090	1090	1100	1090	1090	1080	1090	1090	1100	1080	1080	1070
31	---	---	1110	1100	---	---	1090	1080	1100	1080	---	---
MONTH	---	---	1110	1080	1110	1080	---	---	1110	1060	1100	1070
YEAR	1190	967										

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	12.5	11.5	12.0	11.5	13.0	11.5	11.0	11.0	11.5	10.0
2	---	---	14.0	12.0	12.5	11.5	13.5	12.0	11.0	10.5	11.0	10.0
3	---	---	14.0	13.0	12.5	11.5	13.0	12.0	11.0	10.5	11.0	10.0
4	---	---	14.0	13.5	12.5	11.5	13.0	12.0	11.0	10.5	12.0	10.5
5	---	---	14.0	13.0	12.5	11.5	12.0	12.0	11.0	11.0	11.5	10.5
6	---	---	14.0	12.5	12.5	11.0	12.0	11.5	11.0	11.0	11.5	10.5
7	---	---	13.0	12.0	13.0	11.0	12.0	11.5	11.0	10.5	11.5	10.0
8	---	---	13.0	11.5	13.0	11.5	12.0	11.5	11.0	10.5	10.5	10.0
9	---	---	13.0	12.0	12.5	11.5	12.0	12.0	11.0	10.5	11.0	10.0
10	---	---	13.0	12.5	13.0	11.5	12.5	12.0	11.5	10.5	11.0	10.0
11	---	---	12.5	11.5	12.5	11.5	12.0	12.0	11.5	11.0	11.0	10.0
12	---	---	12.5	11.0	12.5	11.5	12.0	12.0	11.5	11.0	10.5	9.5
13	---	---	12.5	11.5	13.0	11.5	12.5	12.0	11.5	11.0	10.5	10.0
14	---	---	12.5	11.0	12.5	11.5	12.0	11.5	11.5	10.5	10.5	10.0
15	---	---	12.5	11.0	12.5	11.5	12.0	11.5	11.5	11.0	10.5	10.0
16	---	---	12.5	11.5	12.0	11.5	12.0	11.5	11.0	10.5	10.5	9.5
17	---	---	12.5	11.5	12.0	11.0	12.0	11.5	12.0	10.5	10.5	10.0
18	---	---	13.0	11.5	11.5	11.0	12.0	11.5	12.5	11.0	10.5	10.0
19	---	---	13.0	11.5	12.0	11.5	12.0	11.5	11.5	11.0	10.5	9.5
20	---	---	13.0	11.5	12.0	11.5	12.5	11.5	11.5	10.0	10.0	9.5
21	---	---	12.5	11.0	12.0	11.5	12.0	11.5	11.0	10.0	10.0	9.0
22	---	---	13.0	11.5	12.0	11.5	12.5	11.5	11.0	10.0	10.0	9.5
23	---	---	13.0	12.0	12.5	11.5	12.0	11.5	11.0	10.0	10.5	9.5
24	---	---	12.5	11.5	12.0	11.5	12.0	11.5	11.0	10.5	10.5	9.5
25	---	---	12.5	11.5	12.0	11.5	12.0	11.5	11.5	10.5	11.0	10.0
26	13.0	11.5	13.0	11.0	12.0	11.5	12.0	11.5	11.0	10.0	10.5	9.5
27	13.0	12.0	13.0	11.0	12.0	11.5	12.0	11.5	11.0	10.5	10.0	9.5
28	13.0	12.0	12.0	11.0	12.0	11.5	12.0	11.0	11.0	10.5	10.5	9.5
29	13.0	11.5	12.5	11.5	12.0	11.5	11.5	11.0	---	---	10.5	9.5
30	12.5	11.5	12.5	11.5	12.0	11.5	11.5	11.0	---	---	10.5	9.5
31	12.5	11.5	---	---	13.0	11.5	11.5	10.5	---	---	11.0	10.0
MONTH	---	---	14.0	11.0	13.0	11.0	13.5	10.5	12.5	10.0	12.0	9.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	9.5	10.5	9.5	12.0	11.0	11.5	11.0	11.0	10.5	11.0	10.0
2	10.5	10.0	10.5	9.5	12.0	11.5	11.5	11.0	11.0	10.5	---	---
3	10.5	9.5	10.0	9.5	12.0	11.5	---	---	11.0	10.5	11.0	10.0
4	10.5	9.5	10.0	9.5	12.0	11.0	---	---	11.0	10.5	11.0	10.5
5	10.5	10.0	11.0	9.5	12.0	11.5	---	---	11.0	10.5	---	---
6	10.5	10.0	10.0	9.5	12.0	11.5	---	---	11.0	10.5	10.5	10.5
7	10.5	10.0	11.0	9.5	12.0	11.5	---	---	11.0	10.5	11.0	10.5
8	11.0	10.0	11.0	10.0	12.0	11.5	---	---	11.0	10.5	11.0	10.5
9	10.0	9.5	11.0	10.0	12.5	11.5	---	---	11.0	10.5	11.0	10.5
10	10.5	9.0	11.0	10.0	12.0	11.5	---	---	11.0	10.5	11.0	10.5
11	10.0	9.0	11.0	10.5	12.0	12.0	12.5	10.5	11.0	10.5	11.0	10.5
12	10.0	9.5	11.0	10.5	12.0	11.5	---	---	11.0	10.5	11.0	10.5
13	10.0	9.5	11.0	10.5	12.0	11.5	11.0	10.5	10.5	10.0	11.0	10.5
14	10.5	9.5	11.0	10.5	12.0	11.5	11.0	11.0	10.5	10.0	11.0	10.5
15	11.0	10.0	11.0	10.5	12.0	11.5	11.0	10.5	10.5	10.0	11.0	10.5
16	10.5	9.5	11.0	10.5	12.0	11.5	---	---	10.5	10.0	11.5	10.5
17	---	---	11.0	10.5	12.0	11.5	11.0	10.5	10.5	10.0	11.0	10.5
18	---	---	11.0	10.5	12.0	11.0	11.0	10.5	10.5	10.0	11.0	10.5
19	10.5	9.5	11.0	10.5	11.5	11.5	11.0	10.5	11.5	10.5	11.0	10.5
20	---	---	11.5	11.0	12.0	11.0	10.5	10.0	12.0	10.0	11.0	10.5
21	10.0	9.5	11.0	10.5	12.0	11.5	10.5	10.0	10.5	10.0	11.0	10.5
22	---	---	11.0	10.5	11.5	11.5	10.5	10.0	10.5	10.0	11.0	10.5
23	---	---	11.0	10.5	11.5	11.5	10.5	10.0	12.0	10.5	11.0	10.5
24	---	---	11.0	10.5	12.0	11.5	10.5	10.0	12.0	10.0	11.0	10.5
25	---	---	11.0	10.5	12.0	11.0	10.5	10.5	10.5	10.0	11.0	10.5
26	---	---	11.0	10.5	11.5	11.0	10.5	10.5	11.0	10.5	11.0	10.5
27	10.0	9.5	11.5	11.0	11.5	11.0	10.5	10.5	10.5	10.0	11.0	10.5
28	10.5	9.5	11.5	11.0	11.5	11.0	11.0	10.5	11.0	10.0	11.0	10.5
29	10.5	9.5	11.5	10.5	11.5	11.0	11.0	10.5	10.5	10.0	11.5	10.5
30	10.0	9.5	11.5	11.0	11.5	11.0	11.0	10.5	10.5	10.0	11.5	10.5
31	---	---	11.5	11.0	---	---	10.5	10.5	10.5	10.0	---	---
MONTH	---	---	11.5	9.5	12.5	11.0	---	---	12.0	10.0	11.5	10.0
YEAR	14.0	9.0										

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
17...	0800	8000	1	22
18...	0800	8530	--	--
NOV				
14...	0800	12700	2	69
15...	0800	16800	--	--
DEC				
05...	0800	9590	1	26
06...	0800	22800	--	--
JAN				
09...	0830	4990	2	27
10...	0830	2270	--	--
FEB				
13...	0800	577	12	19
14...	0800	2320	--	--
MAR				
13...	0800	14300	2	77
14...	0800	14500	--	--
APR				
10...	0800	12300	1	33
11...	0800	18700	--	--
MAY				
08...	0800	19700	--	--
09...	0800	18700	--	--
JUN				
12...	0830	18400	1	50
13...	0830	18400	--	--
JUL				
10...	0800	8120	2	44
11...	0800	10300	--	--
AUG				
07...	0800	10800	--	--
SEP				
11...	0800	7950	2	43
12...	0800	5620	--	--

09423000 COLORADO RIVER BELOW DAVIS DAM, AZ-NV

LOCATION.--Lat 35°11'30", long 114°34'17", in SE¼NE¼ sec.1, T.32 S., R.66 E., Mount Diablo meridian, in Nevada, Clark County, Hydrologic Unit 15030101, on right bank 0.5 mi (0.8 km) downstream from Davis Dam, 29 mi (47 km) west of Kingman, Ariz., and 68 mi (109 km) downstream from Hoover Dam.

DRAINAGE AREA.--173,300 mi² (448,800 km²), approximately, including 3,959 mi² (10,254 km²) in Great Divide basin in southern Wyoming, which is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1905 to September 1907 (published as "at Hardyville"), March 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 490.00 ft (149.352 m), corrected, National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD since Oct. 1, 1967. 1905-7, nonrecording gage at site 4.8 mi (7.7 km) downstream at datum about 3.4 ft (1.04 m) lower. Mar. 16 to May 3, 1949, water-stage recorder at site 0.5 mi (0.8 km) downstream at datum 10.00 ft (3.048 m) higher. May 4, 1949, to Feb. 24, 1956, water-stage recorder at site 400 ft (120 m) upstream at datum 10.00 ft (3.048 m) higher. Feb. 25, 1956, to Sept. 30, 1967, water-stage recorder at present site at datum 10.00 ft (3.048 m) higher.

REMARKS.--Records good. Flow regulated by Lake Mead since Feb. 1, 1935, and by Lake Mohave since Jan. 17, 1950. Many diversions upstream for irrigation, industrial, and municipal uses.

AVERAGE DISCHARGE.--30 years (water years 1950-79), 12,390 ft³/s (350.9 m³/s), 8,977,000 acre-ft/yr (11,100 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--1905-7: Maximum daily discharge, 116,000 ft³/s (3,290 m³/s) June 20, 1906; minimum daily, 2,850 ft³/s (80.7 m³/s) Jan. 5, 1906.

1949-79: Maximum discharge, 31,200 ft³/s (884 m³/s) Apr. 22, 1952, elevation, 513.91 ft (156.640 m); no flow at Davis Dam parts of several days July to September 1950 and Dec. 27, 1950, when gates in dam were closed; minimum daily discharge, 285 ft³/s (8.07 m³/s) Aug. 3, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 26,400 ft³/s (748 m³/s) Aug. 6, elevation, 505.95 ft (154.214 m); minimum daily 1,940 ft³/s (54.9 m³/s) Dec. 21-24, 26, Jan. 6-8, 10, 18-20, 22-27, 29-31, Feb. 3-5, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7770	5200	4240	5010	1950	9390	9460	17500	13000	13900	18900	15100
2	9670	4990	4240	4740	2090	10400	12500	13300	11800	16700	19000	13900
3	9490	6120	4960	4540	1940	9930	12700	17900	10300	17500	17900	14400
4	9700	7700	5330	4890	1940	8250	14700	18300	13900	17600	18200	14500
5	9260	5940	6260	4290	1940	9360	16400	17800	14100	18200	14000	13100
6	9670	9720	7740	1940	1970	8250	17100	14000	12700	18800	18200	13200
7	9910	6890	7400	1940	1940	6520	18200	18100	11600	19100	17200	13500
8	8550	6940	8410	1940	6000	7100	10600	16000	13300	15900	17900	14400
9	10200	6580	8460	2940	10400	9930	19300	12800	13600	17200	17900	12600
10	9020	7580	6120	1940	7810	10400	15900	16100	11500	19300	18600	13600
11	8880	6780	10400	4820	7810	8710	15200	16100	15200	19400	18600	13400
12	7200	5640	9720	4660	10500	11600	14700	16200	16100	17800	14400	13900
13	7900	8410	8250	4620	9750	12700	16000	12100	18200	17400	15600	14900
14	8010	9030	7720	4050	12400	12000	16400	16800	16800	17800	11900	15200
15	7490	7490	7190	5080	10300	10700	10500	16900	18400	16500	12200	15100
16	7830	6440	8090	3270	8850	11500	17100	16400	19000	18400	15200	13100
17	9310	5980	3740	1950	9570	12900	14900	17200	15700	18500	12000	13800
18	8160	5560	2570	1940	7260	9260	14200	15800	17900	18500	11200	14400
19	8040	4990	2400	1940	9230	13600	14200	17500	16700	18400	11600	14400
20	5150	5580	2150	1940	7580	10300	16500	13200	15900	15600	13500	13200
21	2590	4970	1940	1950	7400	8730	16400	16000	16100	14900	13800	13500
22	2940	4140	1940	1940	8550	8200	11100	12200	16900	12400	12800	13500
23	2720	3330	1940	1940	7470	7830	17900	12900	17900	13900	13500	12600
24	2160	3440	1940	1940	7280	9260	16500	11600	14500	15000	13200	12500
25	2150	2150	4050	1940	8550	7210	13100	11700	16800	15400	14100	12300
26	2160	2300	1940	1940	6760	10200	13000	11700	18100	15100	12900	11200
27	2180	2370	4580	1940	7330	12000	15100	10500	17600	17400	13700	11500
28	2160	2290	5520	1950	7140	13300	15400	14100	15800	16900	14800	11900
29	2160	4020	4640	1940	---	11800	10900	14000	16400	14700	14500	11700
30	3790	4380	5040	1940	---	11400	15400	13800	17200	18300	13600	11300
31	5540	---	5150	1940	---	11400	---	13500	---	18300	14300	---
TOTAL	201760	166950	164070	89800	191710	314130	441360	462000	463000	524800	465200	401700
MEAN	6508	5565	5293	2897	6847	10130	14710	14900	15430	16930	15010	13390
MAX	10200	9720	10400	5080	12400	13600	19300	18300	19000	19400	19000	15200
MIN	2150	2150	1940	1940	1940	6520	9460	10500	10300	12400	11200	11200
AC-FT	400200	331100	325400	178100	380300	623100	875400	916400	918400	1041000	922700	796800

CAL YR 1978 TOTAL 3893930 MEAN 10670 MAX 19800 MIN 1940 AC-FT 7724000
WTR YR 1979 TOTAL 3886480 MEAN 10650 MAX 19400 MIN 1940 AC-FT 7709000

09423000 COLORADO RIVER BELOW DAVIS DAM, AZ-NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1969 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO
OCT 02...	1100	10300	1080	7.4	18.0	320	200	82	29	99	39	2.4
NOV 01...	1250	4850	1090	7.5	17.0	320	200	81	29	100	40	2.4
DEC 01...	1000	4780	1090	7.8	10.0	330	210	83	30	110	42	2.6
JAN 02...	1200	4020	1090	8.0	9.0	340	220	87	30	100	38	2.4
FEB 01...	1140	1890	1090	7.9	8.0	330	220	84	30	100	39	2.4
MAR 01...	1200	10400	1100	7.9	10.0	340	210	85	31	100	39	2.4
APR 02...	0920	14900	1100	7.9	13.0	340	220	86	30	100	39	2.4
MAY 01...	0945	19000	1110	8.1	15.5	340	210	86	30	110	41	2.6
JUN 01...	1000	15000	1100	7.9	19.0	330	210	85	29	110	41	2.6
JUL 02...	1100	23900	1100	7.6	19.0	320	190	76	31	100	40	2.4
AUG 01...	1200	24000	1100	7.8	20.0	340	220	86	31	110	52	2.6
SEP 04...	1030	16500	1100	7.8	17.0	290	160	75	26	100	42	2.5

DATE	SODIUM+ POTAS-SIUM DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT 02...	--	4.9	0	120	9.6	310	93	.4	8.7	719	702	.28
NOV 01...	--	5.3	0	120	7.6	300	92	.3	9.7	718	693	.35
DEC 01...	--	5.4	0	120	3.8	300	93	.3	8.6	722	705	.22
JAN 02...	--	6.1	0	120	2.4	290	110	.3	7.7	717	706	.16
FEB 01...	--	4.3	0	110	2.8	300	110	.3	8.3	717	707	.18
MAR 01...	--	5.3	0	130	3.2	290	98	.4	8.6	717	698	.19
APR 02...	--	5.2	0	120	3.0	300	94	.4	8.9	715	699	.12
MAY 01...	--	5.3	0	130	2.0	300	91	.4	7.6	735	710	.11
JUN 01...	110	4.8	0	120	3.0	290	89	.4	7.2	738	690	.10
JUL 02...	110	5.9	0	120	6.0	300	92	.3	8.6	735	688	.11
AUG 01...	120	5.5	0	120	3.8	320	98	.3	--	733	--	.28
SEP 04...	110	5.1	--	130	--	300	87	.3	3.0	724	676	.24

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
OCT			
02...	1100	150	<10
NOV			
01...	1250	140	10
DEC			
01...	1000	160	10
JAN			
02...	1200	140	30
FEB			
01...	1140	130	0
MAR			
01...	1200	140	20
APR			
02...	0920	150	0
MAY			
01...	0945	150	0
JUN			
01...	1000	150	10
JUL			
02...	1100	160	10
AUG			
01...	1200	160	<10
SEP			
04...	1030	--	<10

< Actual value is known to be less than the value shown.

09423500 COLORADO RIVER AT NEEDLES, CA

LOCATION.--Lat 34°51'00", long 114°36'33", in SE¼SE¼ sec.19, T.9 N., R.23 E., San Bernardino meridian, San Bernardino County, Hydrologic Unit 15030101, on right bank at Needles, 15 mi (24 km) upstream from gaging station near Topock, Ariz., 30 mi (48 km) downstream from Davis Dam, and 97 mi (156 km) downstream from Hoover Dam.

DRAINAGE AREA.--174,500 mi² (452,000 km²), approximately, including 3,959 mi² (10,254 km²) in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--April 1931 to current year (elevations only).

REVISED RECORDS.--WSP 1119: 1931-47.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft (121.920 m) National Geodetic Vertical Datum of 1929. Prior to May 15, 1942, at site 550 ft (170 m) downstream and May 15, 1942, to Feb. 16, 1969, at site 200 ft (60 m) upstream; at datum 66.23 ft (20.187 m) higher prior to Jan. 12, 1952, and at present datum thereafter.

REMARKS.--Flow regulated by Lake Mead since Feb. 1, 1935, and by Lake Mohave since Jan. 17, 1950.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 475.77 ft (145.015 m) Nov. 30, 1944; minimum, 457.84 ft (139.550 m) Feb. 26, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 469.46 ft (143.091 m) June 17; minimum, 458.01 ft (139.601 m) Feb. 6, 7, 8.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	461.72	460.01	460.61	458.11	462.03	463.01	466.52	464.83	465.97	467.28	465.31
2	---	460.73	460.22	460.39	458.12	463.19	463.17	466.76	464.50	465.39	467.27	465.09
3	462.96	460.35	460.03	460.11	458.16	463.32	464.45	464.54	463.78	467.21	466.81	465.04
4	463.12	461.65	460.52	460.30	458.06	462.75	464.78	467.38	463.91	467.08	465.17	464.35
5	462.98	461.83	460.71	460.68	458.06	462.49	465.95	466.81	465.14	466.72	465.97	464.98
6	462.94	461.78	461.57	458.71	458.02	462.94	466.58	466.15	464.69	467.57	466.06	464.44
7	463.11	462.42	462.22	458.36	458.02	461.56	466.78	465.98	464.41	467.60	466.44	464.66
8	462.97	461.62	462.45	458.28	458.37	461.55	465.05	466.40	464.34	466.52	466.59	464.97
9	462.84	461.77	462.21	458.47	462.02	462.17	465.51	465.25	464.90	466.86	466.70	464.77
10	463.06	461.65	461.83	458.66	463.06	463.23	466.58	465.64	464.54	467.48	467.05	464.46
11	462.60	461.86	462.59	458.91	462.09	463.22	465.75	465.03	465.11	467.64	466.83	464.66
12	462.19	461.39	463.10	460.10	462.58	463.15	465.42	466.22	465.87	467.24	465.92	464.60
13	461.82	461.45	462.97	460.09	463.70	464.34	465.92	465.36	466.92	466.76	465.67	465.94
14	462.15	462.73	462.17	459.88	463.41	464.46	466.07	469.17	466.54	466.71	464.89	464.97
15	462.03	462.58	462.07	459.71	464.41	463.85	465.01	466.40	466.96	466.67	463.97	465.43
16	462.11	461.77	462.07	460.58	462.44	463.78	464.96	466.28	467.65	466.64	464.58	464.94
17	462.57	461.34	461.59	458.59	463.05	464.27	465.71	466.46	466.37	467.16	464.95	464.60
18	462.53	460.90	459.27	458.31	462.53	463.73	465.56	466.05	466.86	467.13	463.77	464.92
19	462.38	460.93	458.85	458.27	462.38	463.89	465.20	466.60	466.77	467.12	463.77	464.96
20	461.98	460.85	458.67	---	462.45	463.98	465.58	465.45	466.43	467.08	464.41	464.99
21	460.55	460.76	458.41	---	461.78	463.34	466.41	465.56	466.25	465.02	464.83	464.72
22	458.88	460.04	458.32	---	462.21	462.47	464.74	465.34	466.54	465.12	464.42	464.74
23	459.21	459.94	458.27	---	462.14	462.89	465.61	464.43	467.03	464.84	464.66	464.32
24	458.79	459.45	458.27	---	461.82	462.75	466.25	464.37	466.17	465.23	464.66	464.26
25	458.47	459.28	458.86	---	462.18	462.25	465.65	464.07	466.33	465.58	464.49	464.28
26	458.46	458.58	459.12	---	461.88	462.49	464.74	463.96	467.18	465.64	464.85	463.96
27	458.42	458.56	458.68	---	461.67	463.72	465.23	463.90	467.22	466.14	464.75	463.88
28	458.39	458.54	460.40	---	461.73	464.41	465.71	464.08	466.22	466.37	464.89	463.85
29	458.35	458.68	460.29	---	---	464.17	464.98	465.06	466.36	465.73	465.08	463.83
30	458.35	459.73	460.44	458.10	---	464.08	464.67	465.08	466.82	466.53	464.86	463.71
31	459.98	---	460.20	458.10	---	463.91	---	464.94	---	466.98	465.01	---
MEAN	---	460.83	460.53	---	461.22	463.21	465.38	465.55	465.89	466.51	465.37	464.66
MAX	---	462.73	463.10	---	464.41	464.46	466.78	467.38	467.65	467.64	467.27	465.94
MIN	---	458.54	458.27	---	458.02	461.55	463.17	463.90	463.78	464.84	463.77	463.71

09424000 COLORADO RIVER NEAR TOPOCK, AZ

LOCATION.--Lat 34°41'19", long 114°27'49", in SW1/4NW1/4 sec.13, T.15 N., R.21 W., Gila and Salt River meridian, Mohave County, Hydrologic Unit 15030101, on left bank in Mohave Canyon, 2.4 mi (3.9 km) southeast of Topock, 39 mi (63 km) upstream from Parker Dam, and 45 mi (72 km) downstream from Davis Dam.

DRAINAGE AREA.--176,300 mi² (456,600 km²), approximately, including 3,959 mi² (10,254 km²) in Great Divide basin in southern Wyoming, which is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1917 to current year. Daily mean elevations published since October 1930.

REVISED RECORDS.--WSP 918: 1921. WSP 1313: 1918-19(M).

GAGE.--Water-stage recorder. Datum of gage is 423.02 ft (128.936 m) National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. Prior to Dec. 3, 1922, at site about 1 mi (2 km) upstream at different datum.

REMARKS.--Records good. Many diversions above station for irrigation, municipal, and industrial uses. Flow regulated by Lake Mead since Feb. 1, 1935, and by Lake Mohave since Jan. 17, 1950.

AVERAGE DISCHARGE.--17 years (water years 1918-34), 20,260 ft³/s (573.8 m³/s), 14,670,000 acre-ft/yr (18,100 hm³/yr); 45 years (water years 1935-79), 12,690 ft³/s (359.4 m³/s), 9,194,000 acre-ft/yr (11,300 hm³/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--1917-34: Maximum discharge probably exceeded 200,000 ft³/s (5,660 m³/s) June 22, 1921; minimum, 1,480 ft³/s (41.9 m³/s) Aug. 17, 1934.
1934-79: Maximum discharge, 35,700 ft³/s (1,010 m³/s) Jan. 29, 1942; maximum elevation, 457.37 ft (139.406 m) July 9, 1950; minimum discharge, 375 ft³/s (10.6 m³/s) Feb. 14, 1935; minimum daily, 422 ft³/s (12.0 m³/s) Feb. 14, 1935.

EXTREMES OUTSIDE PERIOD OF RECORD.--Discharge of about 300,000 ft³/s (8,500 m³/s), based on determination at Lees Ferry gaging station, occurred about July 10, 1884. Discharge estimated to be in excess of 400,000 ft³/s (11,300 m³/s) probably occurred within the period 1857-68 and most likely in 1862.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,900 ft³/s (564 m³/s) June 17; maximum elevation, 455.52 ft (138.842 m) July 12; minimum daily discharge, 1,500 ft³/s (42.5 m³/s) Feb. 5; minimum elevation, 447.40 ft (136.368 m) Feb. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6630	4400	3910	4720	1760	6900	10800	14900	13300	15400	16800	13500
2	7800	4380	3930	4710	1760	8700	9130	16300	12900	13900	17300	13800
3	6950	4060	3900	4420	1760	9600	11400	12600	12000	16200	16800	13000
4	9000	4890	4460	4330	1610	9020	11600	16800	11100	16700	16400	13300
5	9030	6300	4760	5020	1500	8030	13300	14700	13300	16300	16000	13400
6	8930	5170	5400	3750	1940	8820	15400	16200	13400	17300	13800	12200
7	9200	7780	6860	2380	1530	7580	16100	14800	12600	17700	15800	12300
8	9380	6120	6950	2210	1530	6530	15400	15800	11700	16900	15700	12600
9	8450	6140	7450	2220	5140	7890	12200	14700	12900	15800	16100	13100
10	9350	6030	7530	2740	9450	8970	16400	12900	12900	16900	16600	11900
11	8450	6700	6500	2390	7910	9700	14800	14600	12100	17900	16600	12400
12	7700	6200	8840	4290	7800	8760	13900	15600	14200	17700	15900	12300
13	6900	5210	8920	4410	9900	11000	14200	14700	15800	16500	14100	13800
14	7370	7390	7730	4360	8800	11600	14800	12200	16500	16000	13800	13100
15	7330	7880	7330	3990	11400	11200	14700	15400	16300	16200	12100	13800
16	7450	6860	7140	4840	8950	10500	11600	15400	17000	15300	12100	13500
17	7750	6000	7550	3560	8210	11000	15000	15400	17000	16600	14000	12300
18	8850	9550	4380	2520	8750	11500	14000	15500	15800	16800	12500	12700
19	8010	5190	2670	2320	7260	10000	13400	15200	16700	16800	12100	13100
20	7660	4800	2220	2210	8500	11400	13500	15600	16100	17000	12500	13200
21	4400	5180	1890	2220	7200	10500	15400	13300	15600	14200	13500	12400
22	3540	4460	1790	2160	7370	8770	14700	14600	15700	13800	13500	12600
23	3420	3890	1760	2040	7870	8140	12200	12300	16600	12500	13400	12400
24	3390	3390	1750	2800	7140	8220	15800	12600	16400	13300	13600	12000
25	3120	3500	1710	2850	7260	8630	15100	12100	14900	14100	13300	12100
26	2560	2380	3200	2080	7410	7770	12700	12000	16000	14500	13700	11700
27	2510	1930	2860	1930	6570	9980	12600	12000	17300	14600	13000	11200
28	2460	2220	3820	1930	6040	11000	13900	11500	16200	15700	13200	11400
29	2390	2260	4410	1900	---	11800	13800	13400	15300	15100	13700	11600
30	2300	3360	4400	1840	---	11000	11500	13500	16000	14600	13400	11400
31	3080	---	4550	1780	---	10500	---	13300	---	16000	13000	---
TOTAL	198990	150000	150270	93240	172720	294210	409330	440500	445200	488900	444300	378100
MEAN	6419	5000	4847	3008	6169	9491	13640	14210	14840	15770	14330	12600
MAX	9380	7880	8920	5020	11400	11800	16400	16800	17800	17900	17300	13800
MIN	2300	1930	1710	1780	1500	6530	9130	11500	11100	12500	12100	11200
AC-FT	394700	297500	298100	184900	342600	583600	811900	873700	883100	969700	881300	750000

CAL YR 1978 TOTAL 3656660 MEAN 10020 MAX 18700 MIN 1710 AC-FT 7253000
WTR YR 1979 TOTAL 3665760 MEAN 10040 MAX 17900 MIN 1500 AC-FT 7271000

09424000 COLORADO RIVER NEAR TOPOCK, AZ--Continued

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	451.74	450.10	449.55	449.72	447.65	450.74	452.23	453.70	453.18	453.94	454.54	453.26
2	451.47	450.09	449.55	449.71	447.65	451.52	451.58	454.18	453.05	453.44	454.69	453.35
3	451.92	449.89	449.51	449.55	447.65	451.86	452.42	452.87	452.72	454.26	454.54	453.06
4	451.97	450.35	449.82	449.50	447.53	451.61	452.52	454.36	452.40	454.45	454.39	453.17
5	451.96	451.03	449.96	449.86	447.45	451.20	453.11	454.34	453.20	454.33	454.24	453.19
6	451.93	450.65	450.32	449.12	447.48	451.53	453.84	454.16	453.20	454.67	453.50	452.77
7	452.04	451.66	451.01	448.22	447.47	450.97	454.06	453.43	452.93	454.82	454.18	452.80
8	452.11	450.09	451.03	448.09	---	450.48	453.78	454.06	452.60	454.56	454.16	452.91
9	451.75	450.88	451.23	448.09	---	450.76	452.65	453.65	453.02	454.18	454.29	453.08
10	452.10	450.80	451.24	448.48	---	451.55	454.14	453.05	453.03	454.57	454.47	452.65
11	451.73	451.14	450.76	448.20	---	451.83	453.58	453.64	452.73	454.92	454.48	452.84
12	---	450.85	452.30	449.43	---	451.46	453.25	453.79	453.49	454.87	454.22	452.60
13	---	450.33	451.80	449.49	---	452.32	453.35	453.68	454.03	454.49	453.62	453.37
14	---	451.36	451.29	449.46	---	452.53	453.58	452.80	454.26	454.33	453.50	453.10
15	---	451.64	451.12	449.25	---	452.37	453.54	453.95	454.19	454.38	452.88	453.35
16	---	451.08	451.02	449.71	---	452.11	452.42	453.94	454.71	454.09	452.89	453.24
17	---	450.65	451.19	448.96	---	452.31	453.64	453.93	454.42	454.50	453.54	452.80
18	---	450.44	449.62	448.28	---	452.50	453.32	453.98	454.03	454.55	452.99	452.94
19	---	450.26	448.98	448.11	---	451.94	453.09	453.90	454.34	454.56	452.84	453.08
20	---	450.05	448.77	448.03	---	452.46	453.15	454.00	454.12	454.63	452.99	453.12
21	---	450.25	448.61	448.02	---	452.10	453.82	453.21	453.93	453.70	453.42	452.83
22	---	449.98	448.52	447.98	---	451.44	453.55	453.67	454.00	453.60	453.38	452.94
23	---	449.54	448.43	447.88	---	451.18	452.69	452.85	454.29	453.17	453.28	452.85
24	---	449.24	448.33	447.85	---	451.23	453.98	452.95	454.20	453.33	453.34	452.70
25	---	449.31	448.24	447.88	---	451.39	453.71	452.76	453.71	453.63	453.21	452.74
26	---	448.75	449.03	447.84	---	451.05	452.87	452.73	454.37	453.76	453.35	452.65
27	449.07	448.56	448.13	447.77	---	451.95	452.86	452.74	454.55	453.78	453.07	452.46
28	449.03	448.62	449.28	447.77	450.71	452.34	453.33	452.53	454.17	454.15	453.16	452.54
29	448.97	448.61	449.81	447.73	---	452.64	453.30	453.24	453.91	453.95	453.32	452.61
30	448.91	449.24	449.55	447.68	---	452.34	452.46	453.25	454.15	453.79	453.21	452.57
31	449.36	---	449.64	447.65	---	452.14	---	453.19	---	454.46	453.08	---
MEAN	---	450.20	449.92	448.56	---	451.76	453.19	453.50	453.70	454.19	453.64	452.93
MAX	---	451.66	452.30	449.86	---	452.64	454.14	454.36	454.71	454.92	454.69	453.37
MIN	---	448.56	448.13	447.65	---	450.48	451.58	452.53	452.40	453.17	452.84	452.46

09424000 COLORADO RIVER NEAR TOPOCK, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1969 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: July 1952 to July 1962.

INSTRUMENTATION.--Water temperature recorder from July 1952 to July 1962.

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	** TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO
OCT												
16...	1150	9330	1090	7.8	10.0	340	210	89	29	110	41	2.6
NOV												
16...	0910	8950	1090	7.7	15.0	310	180	75	29	99	41	2.5
DEC												
12...	1300	9000	1090	7.7	11.0	320	200	78	30	110	42	2.7
JAN												
30...	1130	1940	1130	7.7	8.0	320	200	79	30	110	42	2.7
FEB												
15...	1220	11400	1100	8.0	11.0	330	220	83	30	110	42	2.6
MAR												
15...	1220	11500	1100	8.0	13.0	360	230	94	30	110	40	2.5
APR												
12...	1545	10900	1110	7.9	--	340	220	87	30	110	41	2.6
MAY												
15...	0820	17100	1100	7.9	18.5	330	210	84	30	110	41	2.6
JUN												
13...	0810	17200	1100	7.8	19.0	320	200	75	33	120	57	2.9
JUL												
13...	1300	17200	1100	7.7	20.0	320	190	79	29	100	40	2.4
27...	1030	16000	1100	7.7	18.5	330	210	86	29	110	52	2.4
AUG												
14...	1500	12700	1100	7.9	--	320	200	83	28	110	42	2.7
SEP												
14...	1030	14300	1100	7.7	18.5	310	200	78	29	100	40	2.5

DATE	SODIUM+ POTAS-SIUM DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT												
16...	--	5.6	0	130	4.1	310	93	.3	9.5	712	727	.36
NOV												
16...	--	5.4	0	130	5.1	290	87	.3	8.4	720	674	.22
DEC												
12...	--	5.4	0	110	4.5	310	97	.3	8.6	721	709	.18
JAN												
30...	--	4.7	0	120	4.8	300	100	.3	8.3	749	707	.16
FEB												
15...	--	4.5	0	110	2.2	310	90	.3	8.6	730	706	.18
MAR												
15...	--	5.0	0	130	2.6	300	94	.4	8.7	726	722	.16
APR												
12...	--	5.0	0	120	3.0	310	94	.4	7.8	730	719	.13
MAY												
15...	--	5.2	0	120	3.0	290	92	.4	7.3	733	694	.12
JUN												
13...	130	4.9	0	120	3.8	300	86	.4	9.5	733	704	.17
JUL												
13...	110	5.6	0	128	4.8	290	92	.4	8.3	721	679	.19
27...	120	5.6	0	120	4.8	320	94	.4	8.7	749	729	.24
AUG												
14...	125	4.9	0	123	3.0	300	94	.3	.8	733	696	.21
SEP												
14...	110	5.2	--	110	--	330	97	.4	8.5	746	716	.30

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
OCT			
16...	1150	150	10
NOV			
16...	0910	150	10
DEC			
12...	1300	140	0
JAN			
30...	1130	130	0
FEB			
15...	1220	150	0
MAR			
15...	1220	150	0
APR			
12...	1545	160	10
MAY			
15...	0820	130	0
JUN			
13...	0810	160	0
JUL			
13...	1300	190	0
27...	1030	170	0
AUG			
14...	1500	150	10
SEP			
14...	1030	180	<10

< Actual value is known to be less than the value shown.

09424150 COLORADO RIVER AQUEDUCT NEAR PARKER DAM, AZ-CA

LOCATION.--Lat 34°18'58", long 114°09'23", in NW¼SW¼ sec.20, T.3 N., R.27 E., San Bernardino meridian, in California, San Bernardino County, Hydrologic Unit 15030101, at intake pumping plant of Metropolitan Water District of Southern California on Lake Havasu, 1.8 mi (2.9 km) upstream from Parker Dam and 149 mi (240 km) downstream from Hoover Dam.

PERIOD OF RECORD.--January 1939 to current year (monthly diversions only since October 1942). Published as a supplement to records for Colorado River below Parker Dam, 1942-50. Percolation return flow (monthly flow only) October 1964 to September 1973 (discontinued); prior to October 1964 miscellaneous measurements only.

GAGE.--Venturi meters in pressure lines at intake pumping plant.

REMARKS.--Pumping began Jan. 7, 1939. Figures of monthly diversion shown represent water pumped from Lake Havasu less return surface flow from Gene and Copper Basin Reservoirs. No water returned as surface flow from these reservoirs this year. Percolation return flow from Gene and Copper Basin Reservoirs is estimated by the U.S. Bureau of Reclamation as 10 acre-ft/day (12,300 m^3/day) for a yearly total of 3,650 acre-ft (4.50 hm^3), which is used for accounting purposes.

COOPERATION.--Diversion records furnished by Metropolitan Water District of Southern California.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily diversion, 3,986 acre-ft (4.91 hm^3), 2,010 ft^3/s (56.9 m^3/s) Oct. 25, 1970 and Oct. 29, 1977; no diversion at times.

MONTHLY DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Month	Diversions			
	Maximum	Minimum	Mean	Total
October	2,342	1,629	2,060	63,857
November	1,755	1,628	1,740	52,189
December	2,130	1,660	1,857	57,571
CAL YR 1978	3,829	210	1,972	719,992
January	1,852	0	1,586	49,180
February	1,444	1,335	1,412	39,533
March	1,927	1,427	1,671	51,804
April	3,031	1,826	2,500	75,002
May	3,116	1,850	2,784	86,305
June	3,435	1,740	2,732	81,950
July	2,659	2,521	2,638	81,790
August	2,661	2,564	2,639	81,815
September	2,626	1,357	2,023	60,692
WTR YR 1979	3,435	0	2,142	781,688

09424190 COLORADO RIVER AQUEDUCT NEAR SAN JACINTO, CA
(National stream-quality accounting network station)

LOCATION.--Lat 33°49'18", long 116°58'01", in NE¼ sec.15, T.4 S., R.1 W., San Bernardino County, at west portal of San Jacinto Tunnel, 1.7 mi (2.7 km) southeast of Gilman Hot Springs, and 2.5 mi (4.0 km) north of San Jacinto.

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL ANALYSES: Water years 1975 to current year.
BIOLOGICAL DATA: Water years 1975 to current year.
SEDIMENT RECORDS: Water years 1975 to September 1979, partial-record station (discontinued).

COOPERATION.--Discharge values were furnished by Metropolitan Water District from the aqueduct records.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT												
26...	1245	833	1060	8.4	23.5	1.1	8.6	K1	K140	330	220	82
NOV												
28...	1415	872	1080	8.5	17.0	.60	9.3	K2	83	310	200	75
DEC												
26...	1100	856	1090	7.6	11.0	1.0	11.0	--	--	330	210	81
JAN												
19...	1500	913	1090	7.7	11.5	12	11.4	K8	--	350	230	92
FEB												
14...	1130	696	1090	8.0	12.0	1.8	--	K2	K5	320	200	78
MAR												
20...	1300	919	1080	8.8	16.0	.90	--	K1	K4	340	210	87
APR												
24...	1000	1350	1070	9.3	20.0	1.4	--	K1	K14	370	250	100
MAY												
15...	1000	1530	1090	8.3	24.5	1.5	--	K2	23	350	230	89
JUN												
19...	1610	1500	1200	8.0	23.0	2.0	--	K2	24	370	240	97
JUL												
24...	1000	1310	1100	8.2	27.0	1.3	--	K2	K7	290	170	68
AUG												
21...	1000	1320	1100	8.2	27.0	.40	--	K1	K14	320	200	79
SEP												
26...	1000	924	1050	8.1	26.5	5.0	--	K1	K2	250	180	65

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
OCT												
26...	31	110	41	2.6	5.4	110	310	96	.3	8.9	705	710
NOV												
28...	29	100	41	2.5	4.8	110	290	95	.3	8.1	720	660
DEC												
26...	32	120	43	2.9	5.5	120	310	100	.3	8.9	727	730
JAN												
19...	30	100	38	2.3	4.8	120	310	98	.3	8.8	725	716
FEB												
14...	30	110	42	2.7	5.0	120	300	86	.3	8.4	723	690
MAR												
20...	30	110	41	2.6	5.0	130	320	100	.3	7.6	725	730
APR												
24...	28	97	36	2.2	4.9	120	290	92	.4	8.9	729	694
MAY												
15...	31	100	38	2.3	5.3	120	290	95	.4	7.8	734	691
JUN												
19...	30	110	39	2.5	5.3	130	300	120	.4	8.8	743	750
JUL												
24...	30	93	40	2.4	5.6	120	280	85	.4	8.1	733	642
AUG												
21...	30	100	52	2.4	5.1	120	310	93	.4	8.2	727	690
SEP												
26...	22	90	54	2.3	4.3	71	280	77	.4	3.1	716	585

K Results based on colony count outside the acceptable range (non-ideal colony count).

09424130 COLORADO RIVER AQUEDUCT NEAR SAN JACINTO, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT												
26...	.05	--	.15	--	.45	--	.60	.32	.28	.65	.030	.010
NOV												
28...	.17	--	.01	--	.99	--	1.0	.32	.68	1.2	.020	.020
DEC												
26...	.14	--	.01	--	.39	--	.40	.02	.38	.54	.040	.020
JAN												
19...	.18	--	.01	--	.35	--	.36	--	--	.54	.010	.020
FEB												
14...	.13	--	--	--	.31	--	.33	--	.31	.46	--	--
MAR												
20...	.07	--	.01	--	.19	--	.20	.01	.19	.27	.010	.010
APR												
24...	.02	--	.04	--	.57	--	.61	.36	.25	.63	.010	.010
MAY												
15...	.04	--	.04	--	.36	--	.40	.00	.40	.44	.020	.020
JUN												
19...	.18	--	.06	--	.64	--	.70	--	--	.88	.020	.030
JUL												
24...	.10	--	.01	--	1.5	--	1.5	.20	1.3	1.6	.020	.020
AUG												
21...	.08	--	.11	--	.55	--	.66	.08	.58	.74	.100	.000
SEP												
26...	.18	.13	.02	.03	.64	.51	.66	.12	.54	.84	.000	.000

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT				
02...	0645	1060	1070	23.5
03...	0645	1060	1060	23.0
04...	0645	1060	1070	23.0
05...	1030	1060	1060	24.5
09...	1230	1060	1060	25.0
10...	0640	1060	1060	23.5
11...	0640	1060	1060	23.5
12...	0645	1060	1070	23.0
16...	0645	1060	1070	22.0
17...	0640	1060	1060	22.0
18...	0640	1070	1060	22.0
19...	0645	1070	1060	22.0
24...	0645	1060	1060	21.5
25...	0645	1060	1060	21.0
26...	0640	849	1050	21.0
26...	1245	833	1060	23.5
30...	0645	833	1060	20.5
31...	0645	840	1060	20.0
NOV				
01...	0645	840	1060	20.0
02...	0645	817	1060	20.0
06...	0645	831	1060	19.0
07...	0645	831	1060	19.5
08...	0645	831	1060	19.5
09...	0645	835	1070	19.5
13...	0645	835	1060	17.5
14...	0645	900	1060	17.5
15...	0645	868	1060	17.0
20...	1230	868	1060	17.5
21...	1000	868	1060	17.0
22...	0645	872	1060	17.0
27...	1400	872	1070	16.5
28...	0645	872	1070	16.0
28...	1415	872	1080	17.0
29...	0645	872	1070	16.0
30...	0645	872	1080	16.5
DEC				
04...	0650	1070	1080	14.0
05...	0645	1070	1070	14.0
06...	0640	1070	1070	14.0

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
DEC				
07...	0915	1070	1080	13.0
11...	0650	856	1090	11.0
12...	0645	856	1080	11.0
13...	0650	856	1080	11.0
14...	0640	856	1080	11.0
18...	0640	856	1080	12.0
19...	0640	856	1080	12.0
20...	0645	856	1070	11.5
21...	0645	856	1080	11.5
26...	1050	856	1080	11.5
26...	1100	856	1090	11.0
27...	0650	856	1080	11.0
28...	0650	856	1090	11.0
JAN				
02...	1115	856	1090	10.0
03...	0645	856	1090	10.0
04...	0645	865	1090	10.0
05...	0645	865	1090	10.0
08...	0645	906	1090	10.0
09...	1130	906	1090	10.0
15...	0645	890	1090	10.0
16...	1515	895	1090	10.0
18...	0645	895	1080	10.0
19...	0640	913	1080	10.0
19...	1500	913	1090	11.5
22...	0645	913	1090	10.0
23...	0645	913	1090	10.0
24...	0645	913	1090	10.0
25...	0640	913	1090	10.0
29...	1520	909	1090	10.0
30...	0645	909	1090	10.0
31...	1600	909	1090	10.0
FEB				
01...	0640	917	1090	10.0
05...	0645	670	1090	10.0
06...	0640	696	1090	10.0
07...	0640	696	1090	9.0
08...	0645	696	1090	9.0
12...	0640	696	1090	10.5
13...	0640	696	1090	10.5

09424190 COLORADO RIVER AQUEDUCT NEAR SAN JACINTO, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
FEB				
14...	0630	696	1090	11.0
14...	1130	696	1090	12.0
20...	0645	696	1090	11.5
22...	0640	703	1060	11.5
23...	0915	708	1060	11.5
26...	0640	708	1090	12.0
27...	0640	709	1090	12.0
28...	0640	722	1100	12.0
MAR				
01...	0640	722	1100	12.0
03...	0640	683	1100	13.0
05...	0630	683	1090	13.0
06...	0640	680	1090	13.0
08...	0640	685	1080	14.0
09...	0640	690	1090	14.0
12...	0645	690	1100	14.0
13...	0640	690	1090	14.0
14...	0640	688	1090	14.0
15...	0645	688	1090	14.5
19...	0845	919	1090	14.0
20...	0645	918	1090	14.0
20...	1300	919	1080	16.0
21...	0640	919	1150	14.0
22...	0640	920	1140	14.0
26...	0645	915	1140	14.0
27...	0640	915	1120	14.0
28...	0640	922	1130	15.0
29...	0645	922	1120	15.0
APR				
02...	0640	912	1130	15.0
03...	0645	910	1130	15.0
04...	0640	1130	1130	16.0
05...	0630	1130	1140	16.5
09...	0640	1130	1130	17.0
10...	0630	1130	1140	19.0
11...	0640	1130	1140	19.0
12...	0645	1150	1140	17.0
16...	0645	1150	1140	18.5
17...	0645	1150	1140	18.0
18...	0650	1050	1140	18.0
APR				
20...	0630	1350	1140	18.0
23...	0630	1350	1140	19.0
24...	1000	1350	1070	20.0
MAY				
15...	1000	1530	1090	24.5
JUN				
19...	1610	1500	1200	23.0
JUL				
24...	1000	1310	1100	27.0
AUG				
21...	1000	1320	1100	27.0
SEP				
26...	1000	924	1050	26.5

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
OCT										
26...	1245	2	--	100	0	100	14	9	5	0
JAN										
19...	1500	2	2	100	0	100	12	0	--	10
APR										
24...	1000	3	3	200	100	100	11	0	--	10
JUL										
24...	1000	3	3	100	0	100	1	0	<1	0

DATE	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)
OCT										
26...	0	0	0	0	0	4	2	2	80	70
JAN										
19...	0	10	2	0	4	5	3	2	40	0
APR										
24...	10	0	0	0	<3	4	3	1	100	100
JUL										
24...	0	0	0	0	<3	4	0	4	100	90

< Actual value is known to be less than the value shown.

09424190 COLORADO RIVER AQUEDUCT NEAR SAN JACINTO, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT 26...	10	150	--	--	20	20	0	.0	.0	.0
JAN 19...	50	130	32	98	20	10	10	.1	.1	.0
APR 24...	<0	200	20	140	10	9	<1	.0	.0	.0
JUL 24...	10	6	6	0	20	20	2	.0	.0	.2

DATE	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 26...	3	0	3	0	0	0	20	10	10
JAN 19...	3	0	3	1	1	0	30	10	20
APR 24...	3	0	3	0	0	0	40	40	5
JUL 24...	3	0	3	0	0	0	40	30	8

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT 26...	1245	--	4.4	.5
NOV 28...	1415	3.9	--	--
DEC 26...	1100	4.2	--	--
JAN 19...	1500	--	3.7	.4
FEB 14...	1130	2.8	--	--
MAR 20...	1300	3.4	--	--
APR 24...	1000	4.6	--	.3
MAY 15...	1000	4.1	--	--
JUN 19...	1610	4.3	--	--
JUL 24...	1000	--	4.4	.1
AUG 21...	1000	3.5	--	--
SEP 26...	1000	12	--	--

< Actual value is known to be less than the value shown.

09424190 COLORADO RIVER AQUEDUCT NEAR SAN JACINTO, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	OCT 26.78	NOV 28.78	MAR 20.79	MAY 15.79
TIME	1245	1415	1300	1000
TOTAL CELLS/ML	4600	4500	15000	30000
DIVERSITY: DIVISION	1.5	0.7	1.1	0.1
.CLASS	1.5	0.8	1.1	0.1
..ORDER	2.2	1.6	1.4	0.1
...FAMILY	3.3	2.9	1.5	0.1
....GENUS	3.7	3.0	1.5	0.1

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...COELASTRACEAE								
....COELASTRUM	180	4	--	-	--	-	--	-
...MICRACTINIACEAE								
....MICRACTINIUM	--	-	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	270	6	83	2	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	*	0	--	-
....SELENASTRUM	*	0	83	2	--	-	--	-
....TETRAEDRON	*	0	--	-	*	0	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	180	4	--	-	610	4	--	-
....SCENEDESMUS	130	3	250	6	360	3	*	0
..TETRASPORALES								
...PALMELLACEAE								
....SPHAEROCYSTIS	--	-	--	-	--	-	210	1
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	250	6	390	3	*	0
..ZYGNEMATALES								
...ZYGNEMATACEAE								
....MOUGEOTIA	110	2	170	4	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	89	2	620	14	1700	12	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	*	0	500	11	91	1	--	-
....COCCONEIS	--	-	83	2	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	270	6	1300#	29	300	2	--	-
...FRAGILARIACEAE								
....FRAGILARIA	--	-	--	-	*	0	--	-
....SYNEDRA	220	5	700#	16	--	-	--	-
...NAVICULACEAE								
....NAVICULA	180	4	370	8	91	1	--	-
...NITZSCHIACEAE								
....NITZSCHIA	510	11	--	-	91	1	*	0
...SURIRELLACEAE								
....SURIRELLA	--	-	--	-	--	-	--	-
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...OCHROMONADACEAE								
....OCHROMONAS	--	-	83	2	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	--	-	--	-	--	-	--	-
...CRYPTOMONADACEAE								
....CRYPTOMONAS	44	1	--	-	--	-	*	0
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....AGMENELLUM	180	4	--	-	--	-	--	-
....ANACYSTIS	800#	17	--	-	--	-	--	-
....DACTYLOCOCCOPSIS	--	-	--	-	--	-	--	-
..HORMOGONALES								
...NOSTOCACEAE								
....CYLINDROSPERMUM	930#	20	--	-	--	-	--	-
...OSCILLATORIACEAE								
....LYNGBYA	270	6	--	-	--	-	--	-
....OSCILLATORIA	200	4	--	-	11000#	73	30000#	99
...RIVULARIACEAE								
....RAPHIDIOPSIS	--	-	--	-	--	-	--	-

See footnotes at end of table.

09424190 COLORADO RIVER AQUEDUCT NEAR SAN JACINTO, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	OCT 26,78		NOV 28,78		MAR 20,79		MAY 15,79	
TIME	1245		1415		1300		1000	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....PHACUS	--	-	--	-	*	0	--	-
....TRACHELOMONAS	--	-	--	-	*	0	--	-
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..GYMNODINIALES								
...GYMNODINIACEAE								
....GYMNODINIUM	--	-	--	-	--	-	--	-
..PERIDINIALES								
...GLENODINIACEAE								
....GLENODINIUM	--	-	--	-	*	0	--	-

DATE	JUN 19,79		AUG 21,79		SEP 26,79		SEP 28,79	
TIME	1610		1000		1000		1030	
TOTAL CELLS/ML	760		2900		800		9300	
DIVERSITY: DIVISION	0.7		1.1		1.3		1.5	
.CLASS	0.7		1.1		1.3		1.5	
..ORDER	0.8		1.4		1.7		2.1	
...FAMILY	1.9		2.3		2.7		2.4	
....GENUS	1.9		2.3		2.9		2.6	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	--	-	--	-
...MICRACTINIACEAE								
....MICRACTINIUM	--	-	39	1	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	26	1	--	-	--	-
....DICTYOSPHAERIUM	--	-	26	1	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	520	6
....SELENASTRUM	--	-	--	-	26	3	--	-
....TETRAEDRON	--	-	*	0	26	3	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	--	-	--	-	--	-	--	-
....SCENEDESMUS	52	7	77	3	52	6	1800#	19
..TETRASPORALES								
...PALMELLACEAE								
....SPHAEROCYSTIS	--	-	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	13	2	--	-	--	-	--	-
..ZYGNEMATALES								
...ZYGNEMATACEAE								
....MOUGEOTIA	--	-	--	-	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	26	1	13	2	130	1
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	--	-	--	-
....COCCONEIS	--	-	--	-	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	26	3	220	8	230#	29	--	-
...FRAGILARIACEAE								
....FRAGILARIA	100	14	--	-	--	-	1500#	17
....SYNEDRA	--	-	--	-	170#	21	--	-
...NAVICULACEAE								
....NAVICULA	480#	63	130	5	--	-	130	1

See footnotes at end of table.

09424190 COLORADO RIVER AQUEDUCT NEAR SAN JACINTO, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE TIME	JUN 19,79 1610		AUG 21,79 1000		SEP 26,79 1000		SEP 28,79 1030	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
...NITZSCHIACEAE								
....NITZSCHIA	52	7	310	11	65	8	130	1
...SURIRELLACEAE								
....SURIRELLA	--	-	--	-	13	2	--	-
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...OCHROMONADACEAE								
....OCHROMONAS	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	13	2	--	-	--	-	--	-
...CRYPTOMONADACEAE								
....CRYPTOMONAS	13	2	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....AGMENELLUM	--	-	--	-	--	-	2100#	22
....ANACYSTIS	--	-	140	5	77	10	390	4
....DACTYLOCOCCOPSIS	--	-	--	-	39	5	--	-
..HORMOGONALES								
...NOSTOCACEAE								
....CYLINDROSPERMUM	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE								
....LYNGBYA	--	-	--	-	--	-	--	-
....OSCILLATORIA	--	-	1500#	54	--	-	2600#	28
...RIVULARIACEAE								
....RAPHIDIOPSIS	--	-	310	11	90	11	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....PHACUS	--	-	--	-	--	-	--	-
....TRACHELOMONAS	--	-	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..GYMNODINIALES								
...GYMNODINIACEAE								
....GYMNODINIUM	13	2	--	-	--	-	--	-
..PERIDINIALES								
...GLENODINIACEAE								
....GLENODINIUM	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09424190 COLORADO RIVER AQUEDUCT NEAR SAN JACINTO, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PERIPHYTON

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	LENGTH OF EXPOSURE (DAYS)
OCT						
26...	1245	93.3	1.75	28.5	22.5	98
DEC						
26...	1240	61.6	4.72	39.3	34.1	53
MAR						
20...	1300	9.62	.000	3.30	2.40	34
MAY						
15...	1000	1.26	.000	1.73	1.56	56

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
26...	1245	833	23.5	6	44
NOV					
20...	1415	872	17.0	7	91
DEC					
26...	1100	856	11.0	9	44
JAN					
19...	1500	913	11.5	3	53

09427500 LAKE HAVASU NEAR PARKER DAM, AZ-CA

LOCATION.--Lat 34°18'56", long 114°09'23", in NW¼SW¼ sec.28, T.3 N., R.27 E., San Bernardino meridian, in California, San Bernardino County, Hydrologic Unit 15030101, at intake pumping plant for Colorado River aqueduct of Metropolitan Water District of Southern California, 1.8 mi (2.9 km) upstream from Parker Dam on Colorado River, and 149 mi (240 km), downstream from Hoover Dam.

DRAINAGE AREA.--182,700 mi² (473,200 km²), approximately, including 3,959 mi² (10,254 km²) in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--July 1938 to current year. Published as "Parker Reservoir near Parker Dam" 1938.

REVISED RECORDS.--WRD Ariz. 1975: 1974 (elevation).

GAGE.--Water-stage recorder. Datum of gage is 400.54 ft (122.085 m) National Geodetic Vertical Datum of 1929. Gage readings have been reduced to elevations NGVD.

REMARKS.--Lake is formed by concrete-arch dam; dam was completed and storage began July 1, 1938. Usable capacity--based on April 1957 re-survey by Bureau of Reclamation between elevations 430.54 ft (131.229 m) and 450.54 ft (137.325 m)--619,400 acre-ft (764 hm³) between elevations 400.54 ft (122.085 m), sill of regulating gates, and 450.54 ft (137.325 m), top of regulating gates. Prior to Oct. 1, 1956, different capacity table used. Dead storage, 28,600 acre-ft (35.3 hm³) below elevation 400.54 ft (122.085 m), based on original survey. About 0.07 ft (0.021 m) fall indicated between gage and Parker Dam under normal operating conditions. Drawdown below elevation 440.54 ft (134.277 m) not legally permissible except by consent of the Metropolitan Water District of Southern California or in an emergency affecting the safety of the dam. Lake is used for flood control, power development, re-regulation of river for irrigation demand, and as a basin from which water is pumped by Metropolitan Water District of Southern California to Colorado River aqueduct. Figures given herein represent usable contents. For record of diversion to Colorado River aqueduct, see record for Colorado River aqueduct near Parker Dam elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 693,000 acre-ft (854 hm³), by temporary use of flashboards, Apr. 18, 1943, June 4, 1953; maximum elevation, 450.77 ft (137.395 m) June 26, 1938; minimum contents, 71,400 acre-ft (88.0 hm³) June 25, 1942, elevation, 412.09 ft (125.605 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 600,000 acre-ft (740 hm³) Aug. 19, elevation, 449.57 ft (137.029 m); minimum, 512,800 acre-ft (632 hm³) Feb. 9, elevation, 444.88 ft (135 599 m).

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	577000	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	571000
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	571000
29	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	571000
30	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	570000
31	[illegible]	---	[illegible]	[illegible]	---	[illegible]	---	[illegible]	---	[illegible]	[illegible]	---
MAX	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	571000
MIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CAL YR 1974 MAX [illegible] MIN [illegible]
WTR YR 1975 MAX [illegible] MIN [illegible]

09427500 LAKE HAVASU NEAR PARKER DAM, AZ-CA--Continued

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	447.96	447.47	447.62	446.97	446.09	445.92	446.27	446.71	448.59	447.69	447.65	447.48
2	447.78	447.46	447.57	446.95	446.06	445.83	445.98	447.02	448.59	447.65	447.86	447.44
3	447.78	447.21	447.42	446.92	446.12	445.96	445.71	446.97	448.61	447.44	447.81	447.27
4	447.87	447.05	447.19	446.94	446.02	446.05	445.53	447.14	448.10	447.63	447.76	447.26
5	447.93	447.08	447.10	447.04	445.88	446.02	445.53	447.32	448.04	447.83	447.61	447.32
6	447.90	446.91	446.84	447.21	445.64	446.09	445.58	447.32	448.10	447.96	447.44	447.36
7	447.86	447.07	446.91	447.15	445.36	446.23	445.78	447.28	448.36	448.15	447.52	447.25
8	447.84	447.15	446.91	447.14	445.89	446.17	445.94	447.56	448.06	448.20	447.52	447.15
9	447.75	447.21	446.97	447.19	444.88	445.89	445.73	447.88	447.92	448.18	447.35	447.09
10	447.86	447.24	446.90	447.26	445.12	445.76	446.06	447.94	447.76	448.27	447.50	446.93
11	447.91	447.27	446.81	447.18	445.10	445.71	446.29	447.88	447.42	448.46	447.48	446.97
12	448.10	447.17	446.86	447.28	445.08	445.55	446.62	447.94	447.31	448.70	448.21	447.07
13	447.99	446.97	447.08	447.15	445.15	445.63	446.56	447.93	447.36	448.70	448.76	447.25
14	447.90	447.01	447.31	447.10	445.27	445.80	446.68	447.65	447.42	448.54	449.08	447.30
15	447.76	447.19	447.38	447.13	445.73	446.02	446.82	447.69	447.42	448.38	448.75	447.30
16	447.69	447.36	447.38	447.23	445.98	446.01	446.50	447.82	447.46	448.16	449.03	447.22
17	447.69	447.45	447.72	447.33	446.08	445.99	446.66	448.03	447.61	448.14	449.23	447.16
18	447.82	447.47	447.92	447.27	446.07	446.12	446.71	448.04	447.60	448.29	449.44	447.17
19	448.06	447.42	447.96	447.21	445.94	446.16	446.68	448.09	447.87	448.50	449.44	447.30
20	448.14	447.33	447.92	447.11	446.01	446.37	446.52	448.31	447.98	448.98	449.20	447.51
21	448.54	447.37	447.87	447.02	446.09	446.63	446.56	448.35	448.07	449.00	449.25	447.65
22	448.46	447.53	447.82	446.96	446.15	446.70	446.44	448.52	447.94	449.12	449.16	447.74
23	448.32	447.65	447.62	446.85	446.22	446.70	446.17	448.59	447.82	448.88	448.99	447.79
24	448.33	447.77	447.36	446.76	446.19	446.63	446.31	448.72	447.72	448.72	448.83	447.81
25	448.29	447.86	447.08	446.66	446.16	446.56	446.59	448.70	447.61	448.69	448.49	447.88
26	448.24	447.88	446.96	446.58	446.10	446.26	446.73	448.62	447.63	448.65	448.24	447.96
27	448.12	447.82	446.66	446.48	446.04	446.16	446.63	448.56	447.77	448.42	447.91	448.09
28	448.04	447.74	446.59	446.44	445.97	446.14	446.86	448.28	447.92	448.26	447.64	448.09
29	447.93	447.59	446.89	446.36	---	446.38	446.98	448.31	447.81	447.98	447.64	448.05
30	447.73	447.54	446.84	446.29	---	446.35	446.73	448.41	447.78	447.63	447.60	447.99
31	448.52	---	446.91	446.22	---	446.32	---	448.61	---	447.58	447.62	---
MEAN	448.00	447.37	447.24	446.96	445.76	446.13	446.33	447.96	447.85	448.28	448.27	447.46
MAX	448.54	447.88	447.96	447.33	446.22	446.70	446.98	448.72	448.59	449.12	449.44	448.09
MIN	447.69	446.91	446.59	446.22	444.88	445.55	445.53	446.71	447.31	447.44	447.44	446.93

WTR YR 1979 MEAN 447.31 MAX 449.44 MIN 444.88

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA

LOCATION.--Lat 34°17'44", long 114°08'22", in NW¼NW¼ sec.3, T.2 N., R.27 E., San Bernardino meridian, in California, San Bernardino County, Hydrologic Unit 15030104, on north end of powerplant at Parker Dam, 13 mi (21 km) northeast of Parker, Ariz., and 14 mi (23 km) upstream from Headgate Rock Dam.

DRAINAGE AREA.--182,700 mi² (473,200 km²), approximately, including 3,959 mi² (10,254 km²) in Great Divide basin in southern Wyoming, which is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February to September 1934 (gage heights and fragmentary discharge records), October 1934 to current year. Prior to October 1937, published as "near Parker, Ariz."

REVISED RECORDS.--WSP 1313: 1941(M).

GAGE.--Water-stage recorder. Datum of gage is 300.54 ft (91.605 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1967, at site 3.8 mi (6.1 km) downstream at datum 346.23 ft (105.531 m) N.G.V.D.

REMARKS.--Records good prior to March and excellent thereafter. Flow regulated by Lake Mead since Feb. 1, 1935, by Lake Mohave since Jan. 17, 1950, and by Lake Havasu since July 1, 1938. Many diversions above station. For record of diversion to Colorado River aqueduct and return flows, see record for Colorado River aqueduct near Parker Dam, elsewhere in this report.

AVERAGE DISCHARGE.--45 years, 11,890 ft³/s (336.7 m³/s), 8,614,000 acre-ft/yr (10,600 hm³/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,400 ft³/s (1,200 m³/s) Feb. 8, 1937; no flow at Parker Dam for parts of several days in 1942 when gates in dam were closed; minimum daily discharge, 920 ft³/s (26.1 m³/s) Jan. 11, 1978.

An unregulated discharge of probably less than 1,350 ft³/s (38.2 m³/s) occurred Aug. 18, 1934 (lowest unregulated discharge since 1917 and probably since a much earlier date).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,500 ft³/s (552 m³/s) Apr. 18; maximum gage height, 72.07 ft (21.967 m) Aug. 5; minimum daily, 1,700 ft³/s (48.1 m³/s) Feb. 3, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6800	4800	3810	3720	1850	7210	11200	13900	12000	15500	16000	13700
2	6730	4330	3390	3900	2960	9550	12800	12900	12100	16000	15100	13500
3	7460	6010	4410	4200	1700	8860	12300	13000	12400	16100	17100	14000
4	7600	5000	5430	3440	1720	8820	12800	13500	12900	15300	16800	14600
5	6470	6100	5670	3250	1700	8470	13000	14200	12900	14300	17400	12300
6	6210	6400	5800	2060	3570	8310	14300	15200	11000	15600	15300	11300
7	6840	5140	5410	2050	3830	6720	14400	14000	10600	15900	14800	12500
8	6670	5320	6140	2020	3820	7410	14200	12200	13200	16400	16000	12500
9	6400	4960	6030	2010	5780	9420	14000	11300	13600	16200	15200	12600
10	7670	5090	6640	2000	6770	10200	13100	11600	14000	15700	16700	12700
11	7400	5840	7280	2960	7290	10200	12600	14200	14400	16000	16500	11200
12	8800	6770	7390	3760	7760	10200	12400	13500	14500	15100	11000	10800
13	7230	6560	6640	3570	8000	10300	13100	14200	14500	16900	8600	11300
14	7480	6780	4980	3450	7950	9960	13800	13500	14400	17900	9660	12200
15	7820	5450	5860	3870	6940	9140	13800	14100	15500	17600	13700	12900
16	7310	6530	6050	2620	7500	10900	12600	13200	16100	17400	9190	13400
17	7140	6560	3670	1830	8110	10000	12900	12800	15500	17100	9160	12300
18	6660	6720	1970	1830	8200	10300	13100	14500	14600	16000	9950	12300
19	6890	6430	1760	1800	8410	9820	13100	13900	14200	15500	9690	11400
20	6310	4970	1720	1850	7470	9600	14400	13100	14100	13300	11600	11100
21	2480	3700	1720	1910	6850	8170	14100	12300	13700	12800	12100	10800
22	2710	2700	1760	1830	6630	8190	15600	12300	16300	13900	12900	11400
23	3170	2220	2700	1760	7640	8110	14100	10700	16700	14200	13300	11900
24	1940	1950	3930	1800	7560	8260	14000	9990	16700	13600	13500	11100
25	1940	1930	3980	1850	7660	9190	12100	11400	15600	13400	14900	10900
26	1910	1930	4620	1830	7950	9830	11700	10900	15700	13800	14800	10400
27	1880	1890	4220	1790	7550	10300	12900	11400	15300	15900	14700	9660
28	1880	1910	4130	1800	7490	11000	11700	12000	14200	16400	14600	10600
29	2460	2900	2130	1780	---	9810	11600	12400	15800	17300	12800	10800
30	6530	2920	4460	1770	---	11400	12600	11700	15900	17300	12200	11300
31	6760	---	3330	1760	---	10700	---	10800	---	16700	13200	---
TOTAL	181690	134770	136190	76540	169820	290270	391300	394690	428400	484300	418330	357660
MEAN	5861	4492	4393	2469	6065	9364	13040	12730	14280	15620	13490	11920
MAX	8800	6780	7390	4200	8410	11400	15600	15200	16700	17900	17400	14600
MIN	1880	1890	1720	1760	1700	6720	11200	9990	10600	12800	8600	9660
AC-FT	360400	267300	270100	151800	336800	575800	776100	782900	849700	960600	829800	709400

CAL YR 1978 TOTAL 3370500 MEAN 9234 MAX 16600 MIN 920 AC-FT 6685000
WTR YR 1979 TOTAL 3463960 MEAN 9490 MAX 17900 MIN 1700 AC-FT 6871000

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1963 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: February 1954 to August 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT											
02...	0730	--	1090	--	21.5	--	--	--	--	--	--
10...	0730	--	1090	--	23.5	--	--	--	--	--	--
16...	1230	9360	1090	7.6	23.0	1	--	7.5	1	310	200
23...	0730	--	1080	--	22.0	--	--	--	--	--	--
30...	0745	--	1090	--	21.0	--	--	--	--	--	--
NOV											
06...	0800	--	1080	--	20.5	--	--	--	--	--	--
13...	1305	6680	1090	7.8	19.0	3	--	8.0	2	330	210
20...	0800	--	1090	--	18.5	--	--	--	--	--	--
27...	1230	--	1100	--	14.5	--	--	--	--	--	--
DEC											
04...	1410	--	1100	--	12.0	--	--	--	--	--	--
07...	1100	9530	1110	7.9	13.0	2	--	11.0	1	320	200
11...	1500	--	1110	--	12.0	--	--	--	--	--	--
18...	1530	--	1110	--	10.5	--	--	--	--	--	--
26...	1355	--	1110	--	11.0	--	--	--	--	--	--
JAN											
02...	1400	--	1090	--	10.0	--	--	--	--	--	--
08...	0730	--	1100	--	9.5	--	--	--	--	--	--
09...	1230	--	1100	7.1	--	--	--	--	--	--	--
11...	0830	6690	1100	8.1	9.0	2	--	11.0	1	330	200
15...	0745	--	1100	--	9.5	--	--	--	--	--	--
22...	0730	--	1100	--	10.0	--	--	--	--	--	--
29...	0730	--	1100	--	9.5	--	--	--	--	--	--
FEB											
05...	0730	--	1100	--	9.0	--	--	--	--	--	--
12...	0730	--	1110	--	10.0	--	--	--	--	--	--
15...	1100	9450	1090	8.2	10.0	5	--	9.0	1	310	210
20...	0730	--	1100	--	10.0	--	--	--	--	--	--
26...	0730	--	1110	--	11.0	--	--	--	--	--	--
MAR											
05...	1315	--	1100	--	18.5	--	--	--	--	--	--
12...	1130	9520	1070	8.0	15.0	4	--	11.0	1	320	200
19...	1300	--	1070	--	--	--	--	--	--	--	--
26...	1015	--	1060	--	15.5	--	--	--	--	--	--
APR											
02...	0730	--	1060	--	15.5	--	--	--	--	--	--
09...	1245	19000	1090	8.4	18.0	--	3.3	8.0	7	340	210
16...	0730	--	1100	--	16.5	--	--	--	--	--	--
23...	0840	--	1110	--	18.0	--	--	--	--	--	--

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT											
02...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
16...	76	30	110	43	2.7	4.9	0	110	5.6	280	96
23...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
NOV											
06...	--	--	--	--	--	--	--	--	--	--	--
13...	82	30	100	39	2.4	4.9	0	120	3.8	290	97
20...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
DEC											
04...	--	--	--	--	--	--	--	--	--	--	--
07...	78	30	110	42	2.7	5.6	0	120	3.0	300	110
11...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
JAN											
02...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
11...	81	32	120	43	2.9	5.7	0	130	2.9	300	100
15...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
FEB											
05...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
15...	76	29	100	41	2.5	5.2	0	98	1.2	300	95
20...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
MAR											
05...	--	--	--	--	--	--	--	--	--	--	--
12...	83	27	110	42	2.7	4.5	0	120	2.4	280	92
19...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
APR											
02...	--	--	--	--	--	--	--	--	--	--	--
09...	87	30	100	39	2.4	4.8	0	130	1.8	280	87
16...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT										
02...	--	--	692	--	--	--	--	--	--	--
10...	--	--	696	--	--	--	--	--	--	--
16...	.2	8.8	720	675	.08	.08	.44	.52	.01	.01
23...	--	--	692	--	--	--	--	--	--	--
30...	--	--	688	--	--	--	--	--	--	--
NOV										
06...	--	--	692	--	--	--	--	--	--	--
13...	.3	8.7	725	687	.08	.08	.48	.56	.01	.00
20...	--	--	692	--	--	--	--	--	--	--
27...	--	--	704	--	--	--	--	--	--	--
DEC										
04...	--	--	688	--	--	--	--	--	--	--
07...	.3	9.1	732	718	.21	.16	.69	.90	.02	.01
11...	--	--	710	--	--	--	--	--	--	--
18...	--	--	708	--	--	--	--	--	--	--
26...	--	--	710	--	--	--	--	--	--	--
JAN										
02...	--	--	692	--	--	--	--	--	--	--
08...	--	--	704	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
11...	.3	9.5	720	728	--	.14	--	--	.02	.00
15...	--	--	696	--	--	--	--	--	--	--
22...	--	--	698	--	--	--	--	--	--	--
29...	--	--	696	--	--	--	--	--	--	--
FEB										
05...	--	--	702	--	--	--	--	--	--	--
12...	--	--	702	--	--	--	--	--	--	--
15...	.3	9.3	716	675	.14	.14	.38	.52	.06	.01
20...	--	--	696	--	--	--	--	--	--	--
26...	--	--	702	--	--	--	--	--	--	--
MAR										
05...	--	--	696	--	--	--	--	--	--	--
12...	.4	9.3	708	681	.10	.10	.29	.39	.01	.00
19...	--	--	676	--	--	--	--	--	--	--
26...	--	--	684	--	--	--	--	--	--	--
APR										
02...	--	--	688	--	--	--	--	--	--	--
09...	.4	8.2	721	677	.15	.15	.46	.61	.07	.10
16...	--	--	690	--	--	--	--	--	--	--
23...	--	--	708	--	--	--	--	--	--	--

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
APR											
30...	0730	--	1100	--	19.0	--	--	--	--	--	--
MAY											
07...	1230	10700	1110	8.2	20.0	1	--	9.0	15	330	210
14...	1030	--	1110	--	21.5	--	--	--	--	--	--
21...	1040	--	1090	--	21.5	--	--	--	--	--	--
29...	1035	--	1100	--	23.5	--	--	--	--	--	--
JUN											
04...	1010	--	1100	--	21.0	--	--	--	--	--	--
11...	1215	10400	1110	8.2	26.0	2	--	--	1	340	210
18...	0500	9540	1100	--	21.0	--	--	--	--	--	--
25...	0245	15000	1100	--	23.5	--	--	--	--	--	--
JUL											
02...	0525	2500	1100	--	23.0	--	--	--	--	--	--
09...	1235	10000	1080	8.0	24.0	2	--	8.4	1	340	210
16...	1230	--	1100	--	22.0	--	--	--	--	--	--
23...	0050	4710	1100	--	24.0	--	--	--	--	--	--
30...	1045	10400	1070	--	24.5	--	--	--	--	--	--
AUG											
06...	0045	9670	1100	7.9	24.0	--	--	--	--	--	--
09...	1045	10500	1100	8.0	25.5	2	--	5.8	--	330	210
13...	0320	--	1080	--	24.5	--	--	--	--	--	--
20...	0236	4070	1080	--	22.0	--	--	--	--	--	--
27...	0629	--	1080	--	--	--	--	--	--	--	--
SEP											
04...	0430	4670	1060	--	23.0	--	--	--	--	--	--
10...	1135	10000	1220	7.7	22.5	--	3.6	6.8	24	310	190
17...	0537	--	1110	--	22.0	--	--	--	--	--	--
24...	0410	--	1110	--	23.5	--	--	--	--	--	--

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	SODIUM+POTAS-SIUM DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)
APR											
30...	--	--	--	--	--	--	--	--	--	--	--
MAY											
07...	81	31	100	39	2.4	--	5.1	0	120	1.5	300
14...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
JUN											
04...	--	--	--	--	--	--	--	--	--	--	--
11...	87	30	110	41	2.6	120	5.1	0	130	1.6	280
18...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
JUL											
02...	--	--	--	--	--	--	--	--	--	--	--
09...	86	30	110	41	2.6	120	5.3	0	130	2.6	300
16...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
09...	81	31	110	42	2.6	120	6.0	0	120	2.4	300
13...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
SEP											
04...	--	--	--	--	--	--	--	--	--	--	--
10...	77	28	110	43	2.7	120	5.1	--	120	--	300
17...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
APR											
30...	--	--	--	696	--	--	--	--	--	--	--
MAY											
07...	95	.4	9.2	702	696	.02	.00	.71	.73	.03	.00
14...	--	--	--	700	--	--	--	--	--	--	--
21...	--	--	--	690	--	--	--	--	--	--	--
29...	--	--	--	730	--	--	--	--	--	--	--
JUN											
04...	--	--	--	696	--	--	--	--	--	--	--
11...	91	.4	7.8	736	691	.11	.11	.91	1.0	.05	.00
18...	--	--	--	730	--	--	--	--	--	--	--
25...	--	--	--	719	--	--	--	--	--	--	--
JUL											
02...	--	--	--	730	--	--	--	--	--	--	--
09...	88	.4	8.3	719	707	.08	.05	.11	.19	.01	.03
16...	--	--	--	758	--	--	--	--	--	--	--
23...	--	--	--	700	--	--	--	--	--	--	--
30...	--	--	--	724	--	--	--	--	--	--	--
AUG											
06...	--	--	--	736	--	--	--	--	--	--	--
09...	95	.3	9.0	614	707	.11	.11	.39	.50	.04	.03
13...	--	--	--	682	--	--	--	--	--	--	--
20...	--	--	--	682	--	--	--	--	--	--	--
27...	--	--	--	724	--	--	--	--	--	--	--
SEP											
04...	--	--	--	698	--	--	--	--	--	--	--
10...	90	.4	100	719	701	.14	.11	.54	.68	.02	.01
17...	--	--	--	714	--	--	--	--	--	--	--
24...	--	--	--	718	--	--	--	--	--	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BORON, TOTAL RECOV- ERABLE (UG/L AS B)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)
OCT										
16...	1230	2	0	230	160	0	0	4	160	--
NOV										
13...	1305	3	0	260	160	0	20	3	240	--
DEC										
07...	1100	3	0	170	140	1	0	4	230	--
JAN										
09...	1230	--	--	--	--	--	0	--	--	--
11...	0830	2	100	230	150	1	10	7	60	--
FEB										
15...	1100	2	100	180	150	0	0	5	160	--
MAR										
12...	1130	3	100	140	150	1	0	5	60	--
APR										
09...	1245	2	100	190	170	1	10	5	120	--
MAY										
07...	1230	2	100	210	170	2	10	0	90	80
JUN										
11...	1215	3	100	200	140	1	0	3	110	100
JUL										
09...	1235	3	100	160	150	0	10	24	80	80
AUG										
09...	1045	3	0	160	140	1	0	6	150	140
SEP										
10...	1135	4	100	160	140	6	10	5	170	--

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
OCT									
16...	<10	1	4	--	6	.0	3	0	40
NOV									
13...	10	7	10	--	0	.0	5	0	20
DEC									
07...	0	7	10	--	3	.0	4	0	20
JAN									
09...	--	--	20	--	10	.0	4	0	10
11...	0	4	30	--	<1	.0	3	0	10
FEB									
15...	10	6	20	--	1	.0	2	1	20
MAR									
12...	10	10	20	--	20	.1	2	0	10
APR									
09...	0	6	20	--	10	.2	4	0	20
MAY									
07...	10	9	20	20	5	.3	3	0	30
JUN									
11...	10	6	20	20	0	.0	3	0	20
JUL									
09...	0	15	20	20	3	.0	3	0	50
AUG									
09...	<10	3	20	20	5	.1	3	0	20
SEP									
10...	<10	4	30	20	8	.0	3	0	10

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT				
16...	1230	4.1	.00	1
NOV				
13...	1305	3.0	.00	0
DEC				
07...	1100	3.7	.00	2
JAN				
09...	1230	--	--	3
11...	0830	3.5	.00	0
FEB				
15...	1100	3.2	.00	0
MAR				
12...	1130	9.2	.00	2
APR				
09...	1245	4.2	.00	1
MAY				
07...	1230	5.5	.00	0
JUN				
11...	1215	3.6	.00	4
JUL				
09...	1235	3.9	.00	0
AUG				
09...	1045	6.4	.00	2
SEP				
10...	1135	4.1	.00	1

< Actual value is known to be less than the value shown.

09429000 PALO VERDE CANAL NEAR BLYTHE, CA

LOCATION.--Lat 33°43'55", long 114°30'40", in NW¼NE¼ sec.19, T.5 S., R.24 E., San Bernardino meridian, Riverside County, Hydrologic Unit 15030104, at canal intake structure on west side of Palo Verde diversion dam, 10 mi (16 km) northeast of Blythe and 44 mi (71 km) downstream from Headgate Rock Dam.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1922 to December 1923, January 1925 to current year (prior to October 1950, monthly discharge only).

REVISED RECORD.--WSP 1213: 1946-48.

GAGE.--Recording gages above and below intakes to record head. Since May 18, 1964, recorder to show gate openings. Datum of gage is: Forebay gage, National Geodetic Vertical Datum of 1929; tailrace gage, 274.13 ft (83.555 m) NGVD. Aug. 7, 1950, to Nov. 30, 1952, water-stage recorder on tailrace and auxiliary rocorder 0.5 mi (0.8 km) downstream and Dec. 1, 1952, to Oct. 28, 1957, recording gage above and below former intake structure 0.2 mi (0.3 km) upstream, at different datums.

REMARKS.--Records good. Daily diversions computed on basis of head on intake gates and gate openings. Records published herein represent flow diverted from Colorado River for irrigation of 92,175 acres (373 km^2) during the 1978 calendar year. Return flows to Colorado River are measured by 11 wasteways and drains extending throughout the project; 5 of these are equipped with water stage recorder and Parshall flume, 3 are equipped with Sparling flowmeters. Return flows have not been subtracted; combined monthly return flows are given in table below.

AVERAGE DISCHARGE.--29 years (water years 1951-79), 1,211 ft^3/s (34.30 m^3/s), 877,400 acre-ft/yr (1,080 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,230 ft^3/s (63.2 m^3/s) July 20, 1977; no flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1090	761	594	71	579	1240	1380	1910	1550	1340	2030	1720
2	1050	837	579	0	570	1390	1450	2020	1610	1820	2070	1600
3	968	977	570	0	562	1340	1640	2020	1680	1840	2050	1680
4	1000	938	612	0	596	1250	1680	2050	1530	1940	1900	1630
5	983	871	723	330	597	1320	1730	1910	1480	1890	1890	1800
6	1030	959	699	538	677	1370	1740	1770	1570	2000	1870	1800
7	987	921	670	497	773	1350	1720	1860	1590	1940	1980	1900
8	930	961	667	476	902	1460	1650	1850	1720	1820	2030	1880
9	1090	916	682	667	914	1560	1700	1770	1760	1770	2000	1760
10	1080	945	641	740	911	1590	1740	1840	1720	1960	2140	1730
11	1110	851	671	698	996	1430	1780	1800	1710	1980	2110	1640
12	968	839	728	639	1300	1420	1830	1810	1900	2100	1300	1660
13	972	911	749	631	1320	1430	1870	1800	1960	2050	1110	1800
14	974	875	760	657	1160	1400	1680	1800	2130	2030	1100	1990
15	914	897	715	797	1110	1390	1570	1800	2180	1900	1170	1700
16	1040	946	712	671	1150	1440	1670	1840	2100	1970	1140	1440
17	959	985	522	529	1130	1430	1740	1840	1850	1950	905	1530
18	993	858	400	536	1080	1240	1880	1800	1860	2020	909	1520
19	872	742	365	517	1130	1240	1920	1740	1820	2050	855	1530
20	768	745	367	494	1120	1080	2040	1620	1870	1660	991	1530
21	527	791	377	507	1100	958	1960	1670	1810	1510	1090	1520
22	491	744	389	493	1050	971	1710	1610	1750	1440	1310	1540
23	501	709	386	504	1090	977	1930	1650	1910	1420	1640	1390
24	466	638	382	526	1060	968	1930	1630	1980	1570	1680	1430
25	447	520	365	508	994	1010	1940	1560	1790	1780	1740	1520
26	531	510	469	518	989	1210	2050	1640	1800	1920	1740	1400
27	562	530	625	516	1030	1470	1980	1410	1910	2000	1940	1460
28	571	543	679	509	1070	1600	1780	1460	1960	1880	1950	1360
29	599	548	701	514	---	1680	1740	1530	1960	1880	1990	1240
30	624	545	778	535	---	1530	1950	1530	1900	1950	1950	1080
31	625	---	622	558	---	1400	---	1480	---	2000	1820	---
TOTAL	25702	23733	18199	15176	26960	41144	53380	54020	54360	57380	50400	47780
MEAN	829	791	587	490	963	1327	1779	1743	1812	1851	1626	1593
MAX	1110	977	778	797	1320	1680	2050	2050	2180	2100	2140	1990
MIN	447	510	365	0	562	958	1380	1410	1480	1340	855	1080
AC-FT	50980	47070	36100	30100	53480	81610	105900	107100	107800	113800	99970	94770

CAL YR 1978 TOTAL 447582.00 MEAN 1226 MAX 2130 MIN 0 AC-FT 887800
WTR YR 1979 TOTAL 468234.00 MEAN 1283 MAX 2180 MIN 0 AC-FT 928700

09429000 PALO VERDE CANAL NEAR BLYTHE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1970 to current year.

COOPERATION.--Water samples collected by U. S. Bureau of Reclamation.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT										
02...	0800	1100	1120	7.8	23.5	--	--	--	310	190
10...	0845	--	1120	--	23.0	--	--	--	--	--
10...	1630	--	1050	7.9	25.5	1.6	8.8	26	--	--
16...	1410	--	1170	--	24.5	--	--	--	--	--
23...	1410	--	1230	--	23.0	--	--	--	--	--
30...	0810	--	1190	--	21.5	--	--	--	--	--
NOV										
06...	1100	980	1180	7.8	20.5	--	--	--	350	230
13...	1450	--	1100	--	20.0	--	--	--	--	--
20...	0920	--	1160	--	16.0	--	--	--	--	--
27...	0930	--	1200	--	--	--	--	--	--	--
DEC										
04...	1550	623	1150	7.8	13.5	--	--	--	330	200
11...	1620	--	1120	--	12.0	--	--	--	--	--
18...	0800	--	--	--	--	--	--	17	--	--
18...	1650	--	1110	--	12.0	--	--	--	--	--
26...	1550	--	1130	--	12.0	--	--	--	--	--
JAN										
02...	1545	.00	1130	7.9	10.5	--	--	--	350	230
08...	1520	--	1290	--	12.0	--	--	--	--	--
15...	1220	--	1140	--	10.5	--	--	--	--	--
22...	1205	--	1240	--	11.0	--	--	--	--	--
29...	1205	--	1240	--	10.0	--	--	--	--	--
FEB										
05...	1210	698	1260	7.9	10.0	--	--	--	370	160
12...	1700	--	1090	--	12.0	--	--	--	--	--
20...	1520	--	1110	--	12.0	--	--	--	--	--
26...	1130	--	1140	--	11.5	--	--	--	--	--
MAR										
05...	1435	1460	1100	7.8	13.5	--	--	--	310	180
12...	0930	--	1100	--	14.5	--	--	--	--	--
19...	0815	--	1100	--	13.5	--	--	--	--	--
26...	0820	--	1110	--	15.5	--	--	--	--	--
APR										
02...	1000	1410	1170	7.7	18.0	--	--	--	350	210
09...	0830	--	1090	--	18.0	--	--	--	--	--
16...	1225	--	1270	--	20.5	--	--	--	--	--
23...	1215	--	1120	--	19.0	--	--	--	--	--
30...	1330	--	1120	--	20.0	--	--	--	--	--
MAY										
07...	0905	1920	1130	7.9	21.0	--	--	--	350	220

09429000 PALO VERDE CANAL NEAR BLYTHE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	SODIUM+ POTAS-SIUM DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
OCT										
02...	76	30	110	43	2.7	--	5.2	0	120	3.8
10...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	5.0	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
NOV										
06...	88	32	130	44	3.0	--	6.2	0	120	3.8
13...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
DEC										
04...	80	31	120	44	2.9	--	5.9	0	120	3.8
11...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	5.5	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--
JAN										
02...	86	33	110	40	2.6	--	6.4	0	120	3.0
08...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
FEB										
05...	94	34	130	43	2.9	--	5.4	0	210	5.2
12...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--
MAR										
05...	76	30	110	43	2.7	--	4.9	0	130	4.1
12...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--
APR										
02...	87	31	120	43	2.8	130	5.5	0	130	5.1
09...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
MAY										
07...	89	30	97	37	2.3	--	5.4	0	120	3.0

09429000 PALO VERDE CANAL NEAR BLYTHE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)
OCT									
02...	310	96	.4	8.9	710	711	--	--	--
10...	--	--	--	--	712	--	--	--	--
10...	320	--	--	--	732	--	0	.13	.58
16...	--	--	--	--	744	--	--	--	--
23...	--	--	--	--	778	--	--	--	--
30...	--	--	--	--	754	--	--	--	--
NOV									
06...	320	110	.3	9.3	752	772	--	--	--
13...	--	--	--	--	700	--	--	--	--
20...	--	--	--	--	738	--	--	--	--
27...	--	--	--	--	764	--	--	--	--
DEC									
04...	310	110	.4	9.3	732	741	--	--	--
11...	--	--	--	--	708	--	--	--	--
18...	340	--	--	--	--	--	--	.19	.84
18...	--	--	--	--	704	--	--	--	--
26...	--	--	--	--	718	--	--	--	--
JAN									
02...	310	100	.3	9.7	718	730	--	--	--
08...	--	--	--	--	826	--	--	--	--
15...	--	--	--	--	722	--	--	--	--
22...	--	--	--	--	784	--	--	--	--
29...	--	--	--	--	784	--	--	--	--
FEB									
05...	340	120	.4	8.7	--	862	--	--	--
12...	--	--	--	--	692	--	--	--	--
20...	--	--	--	--	702	--	--	--	--
26...	--	--	--	--	722	--	--	--	--
MAR									
05...	300	97	.4	8.9	696	707	--	--	--
12...	--	--	--	--	696	--	--	--	--
19...	--	--	--	--	694	--	--	--	--
26...	--	--	--	--	702	--	--	--	--
APR									
02...	310	110	.4	8.6	--	753	--	--	--
09...	--	--	--	--	688	--	--	--	--
16...	--	--	--	--	884	--	--	--	--
23...	--	--	--	--	710	--	--	--	--
30...	--	--	--	--	706	--	--	--	--
MAY									
07...	300	93	.4	7.8	--	697	--	--	--

09429000 PALO VERDE CANAL NEAR BLYTHE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT									
02...	--	--	.16	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
16...	.02	.07	.15	.03	.04	2.4	2.4	.01	.01
16...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
NOV									
06...	--	--	.42	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
DEC									
04...	--	--	.18	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--
18...	.00	.00	.19	.02	.03	.25	.27	.02	.00
18...	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--
JAN									
02...	--	--	.16	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
FEB									
05...	--	--	.15	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--
MAR									
05...	--	--	.18	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--
APR									
02...	--	--	.34	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
MAY									
07...	--	--	.04	--	--	--	--	--	--

09429000 PALO VERDE CANAL NEAR BLYTHE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO
MAY												
14...	0900	--	1120	--	21.5	--	--	--	--	--	--	--
21...	1230	--	1120	--	20.5	--	--	--	--	--	--	--
29...	0755	--	1150	--	22.0	--	--	--	--	--	--	--
JUN												
04...	1215	1670	1090	7.8	22.0	340	210	85	31	110	41	2.6
11...	1030	--	1150	--	23.5	--	--	--	--	--	--	--
18...	0750	--	1120	--	22.0	--	--	--	--	--	--	--
25...	1120	--	1070	--	24.0	--	--	--	--	--	--	--
JUL												
02...	1105	1900	1110	8.0	25.5	320	200	81	29	100	40	2.4
09...	1040	--	1100	--	24.5	--	--	--	--	--	--	--
16...	1110	--	1140	--	25.0	--	--	--	--	--	--	--
23...	0725	--	1100	--	25.5	--	--	--	--	--	--	--
30...	0745	--	1130	--	26.0	--	--	--	--	--	--	--
AUG												
06...	1115	2030	1120	7.8	24.5	320	200	79	30	110	42	2.7
13...	1110	--	1120	--	26.0	--	--	--	--	--	--	--
20...	1035	--	1290	--	23.0	--	--	--	--	--	--	--
27...	1110	--	1090	--	26.0	--	--	--	--	--	--	--
SEP												
04...	1130	1610	1110	7.9	23.5	320	200	80	30	110	54	2.7
10...	1120	--	1230	--	23.5	--	--	--	--	--	--	--
17...	1100	--	1160	--	24.5	--	--	--	--	--	--	--
24...	0705	--	1810	--	26.0	--	--	--	--	--	--	--
26...	0720	--	1910	--	23.0	--	--	--	--	--	--	--

DATE	SODIUM+ POTAS-SIUM DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
MAY												
14...	--	--	--	--	--	--	--	--	--	706	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	716	--	--
JUN												
04...	120	5.0	0	130	4.1	290	93	.4	7.2	--	701	.08
11...	--	--	--	--	--	--	--	--	--	747	--	--
18...	--	--	--	--	--	--	--	--	--	729	--	--
25...	--	--	--	--	--	--	--	--	--	695	--	--
JUL												
02...	110	5.0	0	120	2.4	290	93	.4	8.6	719	683	.25
09...	--	--	--	--	--	--	--	--	--	733	--	--
16...	--	--	--	--	--	--	--	--	--	940	--	--
23...	--	--	--	--	--	--	--	--	--	730	--	--
30...	--	--	--	--	--	--	--	--	--	756	--	--
AUG												
06...	120	5.0	0	120	3.0	310	94	.3	.1	743	703	.22
13...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	810	--	--
27...	--	--	--	--	--	--	--	--	--	720	--	--
SEP												
04...	120	5.1	--	120	--	310	90	.4	9.1	718	716	.13
10...	--	--	--	--	--	--	--	--	--	790	--	--
17...	--	--	--	--	--	--	--	--	--	736	--	--
24...	--	--	--	--	--	--	--	--	--	850	--	--
26...	--	--	--	--	--	--	--	--	--	1230	--	--

09429000 PALO VERDE CANAL NEAR BLYTHE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	BORON, DIS-SOLVED (UG/L AS B)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
OCT						
02...	0800	160	--	<10	--	--
10...	1630	--	6	--	.0	20
NOV						
09...	1100	180	--	20	--	--
DEC						
04...	1550	150	--	0	--	--
10...	0800	--	6	--	.0	20
JAN						
02...	1505	160	--	0	--	--
FEB						
05...	1210	180	--	10	--	--
MAR						
05...	1630	150	--	0	--	--
APR						
02...	1000	180	--	10	--	--
MAY						
07...	0905	150	--	10	--	--
JUN						
04...	1215	150	--	10	--	--
JUL						
02...	1105	190	--	10	--	--
AUG						
06...	1115	150	--	0	--	--
SEP						
04...	1130	150	--	30	--	--

DATE	TIME	ATRA-ZINE, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)
OCT									
10...	1630	.00	.00	.0	.00	.00	.00	.00	.00
DEC									
10...	0800	.00	.00	.0	.00	.00	.00	.00	.00

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)
OCT									
10...	.00	.00	.00	.00	.00	.00	.00	.00	.00
DEC									
10...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	MIREX, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	PHOS-DRIN, TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)
OCT									
10...	.00	.00	.00	.00	.00	0	.00	.00	.00
DEC									
10...	.00	.00	.00	.00	.00	0	.00	.00	.00

< Actual value is known to be less than the value shown.

09429010 COLORADO RIVER AT PALO VERDE DAM, AZ-CA

LOCATION.--Lat 33°43'55", long 114°30'40", in SW¼NE¼ sec.19, T.5 S., R.24 E., San Bernardino meridian, in California, Riverside County, Hydrologic Unit 15030104, on west side of Palo Verde Diversion Dam, 10 mi (16 km) northeast of Blythe, Calif., and 44 mi (71 km) downstream from Headgate Rock Dam.

DRAINAGE AREA.--186,200 mi² (482,300 km²), approximately, including 3,959 mi² (10,254 km²) in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--April 1960 to current year. If records (available in files of Tucson District office) for the two Colorado River Indian Reservation drains entering below Palo Verde Dam are added to records for this station, records equivalent to those published 1956-60 as "Colorado River below Palo Verde Dam" can be obtained.

GAGE.--Two water-stage recorders, one above and one below dam, to record head on gates, and water-stage recorder to record gate opening. Supplementary water-stage recorder above dam operated by Geological Survey and supplementary water-stage recorder below dam operated by Palo Verde Irrigation District. Datum of gages is National Geodetic Vertical Datum of 1929.

REMARKS.--Records good prior to June and excellent thereafter. Record does not include diversion to Palo Verde Canal. (See elsewhere in this report.) Daily discharge computed from relation between discharge, head, and gate openings. Many diversions above station for irrigation, municipal, and industrial uses. Flow regulated by Lake Mead, Lake Mohave, and Lake Havasu.

AVERAGE DISCHARGE.--19 years, 7,282 ft³/s (206.2 m³/s), 5,276,000 acre-ft/yr (6,508 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 13,300 ft³/s (377 m³/s) July 31, 1977; minimum daily, 1,060 ft³/s (30.0 m³/s) Nov. 21, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 13,200 ft³/s (374 m³/s) July 16, Aug. 12; minimum daily, 1,300 ft³/s (36.8 m³/s) Feb. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6430	3950	2270	3600	1580	4940	8210	8780	8850	11500	12000	10200
2	7000	3550	2470	3300	1660	4830	8330	9250	9080	12000	11100	10800
3	7000	3060	2990	3400	1830	7200	8630	9030	9030	12000	12100	10500
4	6300	4620	3610	3100	1480	6390	8460	9040	9510	11700	12400	10500
5	6800	4870	4550	2700	1500	5690	9290	9730	9670	10500	12900	9550
6	5500	4940	4570	2520	1300	5090	9510	11000	9260	10900	12700	9060
7	6800	5240	4790	1980	2780	5230	10500	10600	7850	11000	10600	8330
8	6800	4880	4310	1820	2840	4270	10500	9870	7810	12200	11400	9330
9	6800	4170	5080	1560	3810	5110	10100	8280	9730	12200	10600	9510
10	6800	3810	5100	1500	4650	6930	9860	7920	10100	11900	12200	9740
11	5500	4090	5490	1590	5290	7180	9350	8710	10300	11800	12500	9530
12	5400	4650	6030	2500	5660	7260	9020	10000	10400	11100	13200	8080
13	4400	5610	5990	3120	6390	6650	8760	10200	10400	11100	6950	7800
14	5430	5400	5240	3030	5800	7220	9470	10100	9990	13000	7060	8610
15	5400	5510	4230	3150	6020	6910	9380	9910	10500	13000	8390	9280
16	5540	5260	4840	3320	5340	6370	9370	10100	11900	13200	11100	10000
17	5570	3910	5420	2330	5690	7720	8670	9430	11200	12700	7270	10200
18	5300	3910	3200	1740	6110	7650	8930	10300	11100	12100	7520	9410
19	5000	4200	2100	1730	6420	7670	8660	10800	10400	11100	8100	9200
20	3810	4490	1820	1710	6230	7180	9270	10300	10400	12300	7980	8900
21	3700	4140	1780	1710	5230	7350	10000	9790	10400	9120	9080	8670
22	3100	3010	1740	1780	4960	6410	10300	9320	11200	9820	9150	8420
23	3100	2380	1880	1750	4840	6370	10500	8820	12400	10000	9610	9030
24	2800	2070	2450	1660	5670	6050	10000	7690	12500	10400	10100	9420
25	1800	1920	3320	1720	5630	6540	9440	7180	12200	9970	10700	9310
26	1770	1760	3270	1690	5760	6970	7950	8470	11400	9610	11100	8610
27	1690	1730	3530	1660	5640	7340	8100	8170	11300	10700	10900	7900
28	1610	1640	3210	1660	5540	7770	8950	8760	10500	11300	10600	7610
29	1740	1570	2020	1650	---	7540	7940	9240	11300	12600	10200	8220
30	2210	2300	1360	1650	---	7400	7980	9820	11600	12800	9460	8980
31	3450	---	3090	1570	---	8190	---	8800	---	12500	8910	---
TOTAL	146200	112960	112550	68120	124770	207220	275410	288610	311400	357520	317960	274470
MEAN	4719	3765	3631	2197	4456	6685	9180	9310	10380	11530	10260	9149
MAX	7000	5610	6030	3600	6420	8190	10500	11000	12500	13200	13200	10800
MIN	1610	1570	1360	1500	1300	4270	7940	7180	7810	9120	6950	7610
AC-FT	290100	224100	223200	135100	247500	411000	546300	572500	617700	709100	630700	544400

CAL YR 1978 TOTAL 2587060 MEAN 7089 MAX 12400 MIN 1270 AC-FT 5133000
WTR YR 1979 TOTAL 2597270 MEAN 7116 MAX 13200 MIN 1300 AC-FT 5152000

09429130 PALO VERDE IRRIGATION DISTRICT OLIVE LAKE DRAIN NEAR BLYTHE, CA

LOCATION.--Lat 33°40'30", long 114°32'09", in SW¼SW¼ sec.1, T.6 S., R.23 E., San Bernardino meridian, Riverside County, Hydrologic Unit 15030104, 0.3 mi (0.5 km) upstream from mouth, and 5 mi (8 km) northeast of Blythe.

PERIOD OF RECORD.--October 1968 to September 1970 (partial-record station), October 1970 to current year.

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO
OCT												
02...	0735	7.0	1530	7.4	22.0	490	260	130	39	150	40	3.0
NOV												
02...	1330	6.0	1620	7.6	20.0	540	300	150	41	150	37	2.8
DEC												
04...	0910	6.0	1570	7.7	11.0	520	270	140	41	140	37	2.7
JAN												
03...	1115	.40	1430	7.7	6.0	480	280	130	38	140	38	2.8
FEB												
02...	1015	3.0	1220	7.9	10.0	380	240	98	32	110	38	2.5
MAR												
02...	1030	10	1150	7.8	12.0	350	210	89	32	110	40	2.5
APR												
02...	1615	6.0	1670	7.6	22.0	520	280	140	42	170	41	3.2
MAY												
02...	1400	11	1570	7.8	19.0	520	290	140	42	150	38	2.9
JUN												
01...	1515	11	1640	7.6	21.0	540	300	150	41	160	39	3.0
JUL												
02...	1000	16	1570	7.6	26.0	490	250	130	41	150	39	2.9
AUG												
01...	1145	15	1360	7.8	27.0	450	260	120	37	140	38	2.9
SEP												
04...	—	18	1630	7.8	25.0	490	230	140	35	160	41	3.1

DATE	SODIUM+POTASSIUM DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
OCT												
02...	--	6.6	0	230	18	400	130	.5	17	1070	1010	.29
NOV												
02...	--	6.6	0	250	12	450	140	.6	18	1120	1100	.13
DEC												
04...	--	7.0	0	250	9.6	420	120	.4	17	1090	1050	.20
JAN												
03...	--	7.5	0	210	6.8	390	130	.3	12	971	972	.17
FEB												
02...	--	5.1	0	140	3.4	330	110	.3	8.6	814	778	.10
MAR												
02...	--	5.2	0	150	4.6	290	100	.4	9.2	771	725	.11
APR												
02...	--	7.2	0	250	12	460	150	.4	19	1130	1120	.14
MAY												
02...	160	6.4	0	230	7.1	400	120	.4	16	1080	1020	.13
JUN												
01...	170	6.7	0	250	12	430	130	.4	16	1140	1080	.14
JUL												
02...	160	6.5	0	250	12	400	130	.4	18	1080	1020	.14
AUG												
01...	150	6.3	0	190	5.8	370	110	.1	3.4	910	901	.07
SEP												
04...	170	6.3	--	260	--	440	130	.4	17	1070	1090	.20

09429130 PALO VERDE IRRIGATION DISTRICT OLIVE LAKE DRAIN NEAR BLYTHE, CA—Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 02...	0730	200	<10
NOV 02...	1330	280	30
DEC 04...	0910	200	30
JAN 03...	1115	170	50
FEB 02...	1015	140	0
MAR 07...	1030	150	20
APR 02...	1615	200	0
MAY 02...	1400	200	10
JUN 01...	1515	220	10
JUL 02...	1000	200	10
AUG 01...	1145	190	30
SEP 04...	—	5	<10

< Actual value is known to be less than the value shown.

09429220 PALO VERDE IRRIGATION DISTRICT OUTFALL DRAIN NEAR PALO VERDE, CA

LOCATION.--Lat 33°21'41", long 114°43'20", in SE¼SE¼ sec.26, T.9 S., R.21 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030104, at gaging station, at State Highway 78 bridge, 3.3 mi (5.3 km) upstream from mouth, and 5 mi (8 km) south of Palo Verde.

PERIOD OF RECORD.--October 1968 to current year.

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1962-68 available from district office in Tucson, Ariz.

COOPERATION.--Water samples collected by U. S. Bureau of Reclamation.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT										
02...	1345	642	2270	8.0	25.0	--	--	--	480	260
10...	1130	--	2570	--	26.0	--	--	--	--	--
11...	0800	--	2500	7.8	22.0	7.1	8.8	43	--	--
16...	1000	--	2380	--	24.5	--	--	--	--	--
23...	1000	--	2540	--	25.0	--	--	--	--	--
30...	1415	--	2580	--	24.0	--	--	--	--	--
NOV										
06...	0905	550	2640	7.9	23.0	--	--	--	540	280
13...	0950	--	2550	--	21.5	--	--	--	--	--
20...	1530	--	2510	--	18.5	--	--	--	--	--
27...	1220	--	2520	--	15.5	--	--	--	--	--
DEC										
04...	1115	646	2650	7.9	15.0	--	--	--	560	400
11...	1040	--	2600	--	14.5	--	--	--	--	--
18...	1030	--	2290	--	15.0	--	--	--	--	--
19...	1000	--	--	--	--	--	--	33	--	--
26...	1115	--	2420	--	14.5	--	--	--	--	--
JAN										
02...	1100	516	2300	7.7	13.0	--	--	--	510	280
08...	1110	--	2500	--	12.5	--	--	--	--	--
15...	1515	--	2600	--	15.0	--	--	--	--	--
22...	1510	--	2300	--	13.0	--	--	--	--	--
29...	1400	--	2410	--	13.5	--	--	--	--	--
FEB										
05...	1510	376	2680	7.8	12.5	--	--	--	560	320
12...	1200	--	2530	--	15.0	--	--	--	--	--
20...	1045	--	2900	--	14.5	--	--	--	--	--
26...	0950	--	2710	--	16.5	--	--	--	--	--
MAR										
05...	1410	497	2560	7.7	19.0	--	--	--	560	290
12...	1035	--	2600	--	20.0	--	--	--	--	--
19...	1045	--	2600	--	17.0	--	--	--	--	--
26...	--	--	2610	--	19.5	--	--	--	--	--
APR										
02...	1245	520	2400	8.0	21.0	--	--	--	500	280
09...	1110	--	2600	--	20.5	--	--	--	--	--
16...	1500	--	2600	--	21.5	--	--	--	--	--
23...	1110	--	2670	--	21.0	--	--	--	--	--
30...	0830	--	2370	--	21.0	--	--	--	--	--
MAY										
07...	1035	587	2050	7.7	20.5	--	--	--	540	280

09429220 PALO VERDE IRRIGATION DISTRICT OUTFALL DRAIN NEAR PALO VERDE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	SODIUM+ POTAS-SIUM DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
OCT										
02...	130	41	320	58	6.3	--	6.5	0	230	4.5
10...	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	6.5	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
NOV										
06...	140	45	380	60	7.2	--	8.4	0	250	6.2
13...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
DEC										
04...	140	46	390	61	7.3	--	7.2	0	140	4.3
11...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	7.5	--	--	--
26...	--	--	--	--	--	--	--	--	--	--
JAN										
02...	130	44	350	60	6.8	--	6.5	0	230	8.9
08...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
FEB										
05...	140	46	410	62	7.7	--	8.0	0	220	6.8
12...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--
MAR										
05...	140	45	360	59	6.8	--	7.1	0	250	9.6
12...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--
APR										
02...	130	43	350	60	6.8	--	6.4	0	240	4.6
09...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
MAY										
07...	140	45	360	59	6.8	370	6.7	0	250	9.9

09429220 PALO VERDE IRRIGATION DISTRICT OUTFALL DRAIN NEAR PALO VERDE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)
OCT									
02...	530	380	1.0	17	1470	1490	--	--	--
10...	--	--	--	--	1650	--	--	--	--
11...	620	--	--	--	1790	--	8	.47	2.1
16...	--	--	--	--	1550	--	--	--	--
23...	--	--	--	--	1640	--	--	--	--
30...	--	--	--	--	1650	--	--	--	--
NOV									
06...	590	390	1.1	20	1700	1730	--	--	--
13...	--	--	--	--	1670	--	--	--	--
20...	--	--	--	--	1610	--	--	--	--
27...	--	--	--	--	1640	--	--	--	--
DEC									
04...	590	410	1.1	20	1710	1690	--	--	--
11...	--	--	--	--	1750	--	--	--	--
18...	--	--	--	--	1490	--	--	--	--
19...	560	--	--	--	--	--	--	.43	1.9
26...	--	--	--	--	1550	--	--	--	--
JAN									
02...	530	340	.9	18	--	1560	--	--	--
08...	--	--	--	--	1640	--	--	--	--
15...	--	--	--	--	1660	--	--	--	--
22...	--	--	--	--	1540	--	--	--	--
29...	--	--	--	--	1540	--	--	--	--
FEB									
05...	580	390	1.1	19	1760	1730	--	--	--
12...	--	--	--	--	1640	--	--	--	--
20...	--	--	--	--	1630	--	--	--	--
26...	--	--	--	--	1780	--	--	--	--
MAR									
05...	530	360	1.0	18	--	1610	--	--	--
12...	--	--	--	--	1670	--	--	--	--
19...	--	--	--	--	1560	--	--	--	--
26...	--	--	--	--	1680	--	--	--	--
APR									
02...	520	310	1.0	18	--	1530	--	--	--
09...	--	--	--	--	1760	--	--	--	--
16...	--	--	--	--	1560	--	--	--	--
23...	--	--	--	--	1580	--	--	--	--
30...	--	--	--	--	1510	--	--	--	--
MAY									
07...	560	340	1.1	19	--	1630	--	--	--

09429220 PALO VERDE IRRIGATION DISTRICT OUTFALL DRAIN NEAR PALO VERDE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS NO2)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)
OCT									
02...	--	--	.47	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
11...	.04	.13	.51	.05	.06	.63	.68	.04	.03
16...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
NOV									
06...	--	--	.56	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
DEC									
04...	--	--	.58	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--
19...	.03	.10	.46	.10	.13	.30	.40	.04	.01
26...	--	--	--	--	--	--	--	--	--
JAN									
02...	--	--	.36	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
FEB									
05...	--	--	.66	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--
MAR									
05...	--	--	.91	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--
APR									
02...	--	--	.78	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
MAY									
07...	--	--	.54	--	--	--	--	--	--

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO
MAY												
14...	1005	--	2560	--	22.0	--	--	--	--	--	--	--
21...	1005	--	2450	--	32.0	--	--	--	--	--	--	--
29...	1020	--	2600	--	23.0	--	--	--	--	--	--	--
JUN												
04...	1035	703	2600	7.6	25.0	540	310	140	47	360	59	6.7
11...	1400	--	2630	--	--	--	--	--	--	--	--	--
18...	1030	--	2400	--	25.0	--	--	--	--	--	--	--
25...	--	--	2580	--	26.5	--	--	--	--	--	--	--
JUL												
02...	1120	724	2450	8.0	25.0	510	260	130	45	380	61	7.3
09...	1000	--	2620	--	26.0	--	--	--	--	--	--	--
16...	1010	--	2350	--	27.0	--	--	--	--	--	--	--
30...	0830	--	2520	--	27.0	--	--	--	--	--	--	--
AUG												
06...	1040	720	2520	8.0	26.5	520	280	130	47	370	60	7.1
27...	0925	--	2620	--	27.0	--	--	--	--	--	--	--
SEP												
04...	0920	720	2460	8.0	26.0	530	280	140	43	340	58	6.4

09429220 PALO VERDE IRRIGATION DISTRICT OUTFALL DRAIN NEAR PALO VERDE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
MAY												
14...	--	--	--	--	--	--	--	--	--	1630	--	--
21...	--	--	--	--	--	--	--	--	--	1570	--	--
29...	--	--	--	--	--	--	--	--	--	1640	--	--
JUN												
04...	370	6.4	0	240	12	540	330	1.0	16	--	1590	.47
11...	--	--	--	--	--	--	--	--	--	1520	--	--
18...	--	--	--	--	--	--	--	--	--	1510	--	--
25...	--	--	--	--	--	--	--	--	--	1620	--	--
JUL												
02...	390	7.4	0	300	4.8	530	330	1.1	20	1550	1450	.53
09...	--	--	--	--	--	--	--	--	--	1620	--	--
16...	--	--	--	--	--	--	--	--	--	1530	--	--
30...	--	--	--	--	--	--	--	--	--	1520	--	--
AUG												
06...	380	6.5	0	240	4.6	600	300	1.1	20	1650	1620	.29
27...	--	--	--	--	--	--	--	--	--	1550	--	--
SEP												
04...	350	5.6	--	250	--	550	320	1.2	21	1560	1580	.54

DATE	TIME	ATRA- ZINE, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)
OCT									
11...	0800	.00	.00	.0	.00	.00	.00	.00	.00
DEC									
19...	1000	.00	.00	.0	.00	.00	.00	.00	.00

DATE	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)
OCT									
11...	.00	.00	.00	.00	.00	.00	.00	.28	.00
DEC									
19...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	MIREX, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	PER- THANE TOTAL (UG/L)	PHOS- DRIN, TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)
OCT									
11...	.00	.00	.00	.00	.00	0	.00	.00	.00
DEC									
19...	.00	.00	.00	.00	.00	0	.00	.01	.00

09429225 PALO VERDE IRRIGATION DISTRICT ANDERSON DRAIN NEAR PALO VERDE, CA

LOCATION.--Lat 33°21'19", long 114°43'00", in SW¼ sec.36, T.9 S., R.21 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030104, 0.1 mi (0.2 km) upstream from pump into Outfall drain, and 5.5 mi (8.8 km) south of Palo Verde.

PERIOD OF RECORD.--Water year 1969 (partial-record station), October 1969 to current year.

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1966-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)
OCT		
02...	0930	.00
NOV		
01...	0900	.00
DEC		
01...	1100	.00
JAN		
02...	0915	.00
FEB		
01...	0945	.00
MAR		
01...	1020	.00
APR		
02...	0930	.00
MAY		
01...	0950	.00
JUN		
01...	0900	.00
JUL		
02...	0830	.00
AUG		
02...	0910	.00
SEP		
04...	0940	.00

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA
(National stream-quality accounting network, pesticide, radiochemical, and tritium network station)

LOCATION.--Lat 32°52'59", long 114°27'55", at Imperial Dam. The Arizona end of the dam is in SW¼NW¼ sec.30, T.6 S., R.21 W., Gila and Salt River meridian, Yuma County, Hydrologic Unit 15030104; the California end is in NW¼SW¼ sec.9, T.15 S., R.24 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030104. Imperial Dam is 5 mi (8 km) upstream from Laguna Dam, 15 mi (24 km) northeast of Yuma, Ariz., 90 mi (145 km) downstream from Palo Verde Dam, and 147 mi (237 km) downstream from Parker Dam.

DRAINAGE AREA.--188,500 mi^2 (488,200 km^2), approximately, including 3,959 mi^2 (10,254 km^2) in Great Divide basin in southern Wyoming, which is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--1903-34 (yearly discharge only, published in WSP 1313), July 1934 to current year (monthly discharge only since October 1942). Prior to October 1942 published as "near Picacho, Calif." October 1942 to September 1971 published as "at Imperial Dam" (monthly discharge shown as "flow reaching Imperial Dam," listed as supplement to "flow passing Imperial Dam").

GAGE.--None. This record is synthesized from records of several other stations (see REMARKS). July 13, 1934, to Sept. 30, 1942, water-stage recorder at site 14.5 mi (23.3 km) upstream at datum 167.38 ft (51.017 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records show flow of Colorado River reaching Imperial Dam, and are based on combined monthly total flow of Colorado River below Imperial Dam (sta 09429500), All-American Canal near Imperial Dam (sta 09523000), Gila Gravity Main Canal at Imperial Dam (sta 09522500), and diversions to Mittry Lake (sta 09522400). Records for 1903-34 and for October 1942 to September 1960 were computed as combined flow of Colorado River at Yuma (sta 09521000) and the canals diverting at Imperial and Laguna Dams, less the flow of Gila River near Dome (sta 09520500); for some of these periods drainage and waste return flows and channel losses between the gaging stations and Imperial Dam were considered, and for other periods they were neglected. Records for July 1934 to September 1942 show daily discharge of Colorado River at gaging station near Picacho, Calif.

Natural flow of Colorado River at this point affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, and diversions for irrigation, municipal, and industrial uses, and return flows from irrigated areas. Diversions to Mittry Lake, which began June 23, 1970, are included in river records in table below. Additional regulation, beginning Jan. 31, 1966, to equalize supplies for downstream water users, is provided by pumped storage in reservoir on Senator Wash, about 2 mi (3 km) upstream from Imperial Dam. Monthend contents of Senator Wash Reservoir—capacity, 13,840 acre-ft (17.1 hm^3) is given in table below.

COOPERATION.--Records of Sparling meter readings of diversion to Mittry Lake and contents of Senator Wash Reservoir furnished by Bureau of Reclamation.

AVERAGE DISCHARGE.--45 years (water years 1935-79), 10,900 ft^3/s (308.7 m^3/s), 7,897,000 acre-ft/yr (9,740 hm^3/yr).

EXTREMES FOR PERIOD OF 1934-79.--Maximum discharge, 40,800 ft^3/s (1,160 m^3/s) Sept. 5, 1939; minimum, 538 ft^3/s (15.2 m^3/s) Aug. 3, 1934; minimum daily since regulation of Hoover Dam began, 1,450 ft^3/s (41.1 m^3/s) Feb. 17, 1935.

COLORADO RIVER ABOVE IMPERIAL DAM, DIVERSIONS TO MITTRY LAKE, AND MONTHEND CONTENTS OF SENATOR WASH RESERVOIR, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Month	Discharge of Colorado River		Diversions to Mittry Lake (acre-feet)* (09522400)	Monthend contents, Senator Wash Reservoir (acre-feet)
	Mean (cubic feet per second)	Runoff (acre-feet)		
October	5,802	356,700	533	9,970
November	4,603	273,900	393	13,500
December	4,637	285,100	484	8,110
CAL YR 1978	7,873	5,700,000	6,270	-----
January	2,988	183,700	512	11,680
February	4,744	265,200	443	8,890
March	7,269	447,000	541	13,270
April	10,300	612,600	511	11,130
May	10,470	644,000	513	8,410
June	11,100	660,800	493	7,200
July	12,390	761,800	482	6,630
August	11,760	722,800	626	6,980
September	10,480	623,900	578	6,700
WTR YR 1979	8,063	5,837,000	6,110	-----

* Included in first two columns of table.

NOTE.--Discharge of Colorado River, in first two columns of table above, is combined discharge of Colorado River below Imperial Dam (sta 09429500) and diversions to All-American Canal, Gila Gravity Main Canal, and Mittry Lake.

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

WATER-QUALITY RECORDS

LOCATION.--Water samples collected above trash racks at All-American Canal headworks at west end of Imperial Dam.

PERIOD OF RECORD.--August 1969 to current year.
Prior to October 1971, published as sta 09429500, Colorado River at Imperial Dam, Ariz.-Calif.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1969 to current year.
WATER TEMPERATURES: October 1974 to current year.

REMARKS.--Replaces water-quality station 09525500 Yuma Main Canal below Colorado River Siphon, at Yuma, Ariz. Stream discharges reported with analyses represent total flow reaching Imperial Dam. Since January 1971, daily specific-conductance measurements have been made using a composite of four water samples taken at 6-hour intervals. Composites of four water samples per day are analyzed for major chemical constituents weekly.

COOPERATION.--Daily water temperature record furnished by, and water samples collected by, U. S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum observed, 1,880 micromhos Nov. 21, 1969; minimum observed, 930 micromhos Sept. 26, 1976.
WATER TEMPERATURES: Maximum observed, 33.0°C Aug. 20, 1977; minimum observed, 9.0°C Dec. 26, 1974, Jan. 4, 1976, Jan. 3, 4, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum observed, 1,640 micromhos Dec. 1; minimum observed, 1,190 micromhos Apr. 9, Aug. 12.
WATER TEMPERATURES: Maximum observed, 31.5°C July 24, 27, 28; minimum observed, 9.0°C Jan. 3, 4.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT											
02...	--	--	1300	8.0	--	2.0	--	--	--	--	365
09...	--	--	1290	7.9	--	1.0	--	--	--	--	355
16...	--	--	1340	8.0	--	1.0	--	--	--	--	370
18...	0830	6720	1280	7.8	24.0	--	7.5	75	67	20	--
23...	--	--	1260	7.9	--	10	--	--	--	--	350
30...	1100	3800	1610	8.0	17.0	3.0	--	20	--	--	420
NOV											
06...	--	--	1370	7.9	--	1.0	--	--	--	--	375
13...	--	--	1390	7.9	--	2.0	--	--	--	--	375
15...	0940	5780	1330	8.0	15.0	--	9.6	12	87	36	--
20...	--	--	1390	8.0	--	1.0	--	--	--	--	375
27...	--	--	1520	7.9	--	1.0	--	--	--	--	405
28...	1120	2750	--	--	13.5	--	--	6	--	--	--
DEC											
04...	--	--	1510	8.0	--	1.0	--	--	--	--	395
06...	0900	5400	1500	8.0	11.5	--	9.5	10	54	32	--
11...	--	--	1310	7.8	--	1.0	--	--	--	--	370
18...	--	--	1320	7.9	--	2.0	--	--	--	--	365
19...	1000	2720	--	--	12.0	--	--	65	--	--	--
25...	--	--	1590	7.9	--	1.0	--	--	--	--	420
JAN											
01...	--	--	1460	7.8	--	1.0	--	--	--	--	390
08...	--	--	1500	7.9	--	2.0	--	--	--	--	400
10...	0905	2960	1600	8.2	12.0	--	11.0	14	22	20	--
15...	--	--	1510	8.0	--	1.0	--	--	--	--	405
22...	--	--	1570	7.9	--	1.0	--	--	--	--	415
22...	0900	2100	--	--	11.5	--	--	27	--	--	--
29...	--	--	1590	7.9	--	1.0	--	--	--	--	415
FEB											
05...	--	--	1630	7.9	--	1.0	--	--	--	--	420
12...	--	--	1380	7.9	--	1.0	--	--	--	--	370
14...	0900	6230	1360	8.2	13.0	--	9.6	120	8	26	--
19...	--	--	1260	8.0	--	6.0	--	--	--	--	355
26...	--	--	1280	8.1	--	2.0	--	--	--	--	360
27...	1020	5750	--	--	13.5	--	--	11	--	--	--
MAR											
05...	--	--	--	7.9	--	6.0	--	--	--	--	350
12...	--	--	1260	7.9	--	11	--	--	--	--	355
13...	0800	8350	1240	8.1	17.0	--	9.6	26	--	--	--
14...	0830	--	--	--	--	--	--	--	14	25	--

09429490 COLORADO RIVER ABOVE IMPERIAL DAM,-AZ-CA-.-Continued.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT											
02...	219	90	34	140	45	3.2	5.4	0	146	2.8	335
09...	212	90	32	140	46	3.2	5.6	0	143	3.5	335
16...	222	96	32	145	45	3.3	5.6	0	148	2.9	345
18...	--	--	--	--	--	--	--	--	--	--	--
23...	208	87	32	135	45	3.1	5.4	0	143	3.5	330
30...	243	104	36	190	49	4.0	5.7	0	177	3.5	395
NOV											
06...	226	99	31	150	46	3.4	5.5	0	149	3.7	350
13...	226	100	31	155	47	3.5	5.6	0	149	3.7	355
15...	--	--	--	--	--	--	5.0	--	--	--	--
20...	224	98	32	155	47	3.5	5.5	0	151	2.9	355
27...	234	103	36	175	48	3.8	5.7	0	171	4.2	375
28...	--	--	--	--	--	--	--	--	--	--	--
DEC											
04...	234	102	34	175	49	3.8	5.7	0	161	3.1	375
06...	--	--	--	--	--	--	--	--	--	--	--
11...	222	91	35	140	45	3.2	5.4	0	148	4.6	335
18...	214	94	32	145	46	3.3	5.4	0	151	3.7	335
19...	--	--	--	--	--	--	--	--	--	--	--
25...	248	106	38	185	48	3.9	5.7	0	172	4.2	390
JAN											
01...	231	99	35	165	47	3.6	5.4	0	159	4.9	365
08...	236	103	35	170	48	3.7	5.3	0	164	4.0	365
10...	--	--	--	--	--	--	--	--	--	--	--
15...	240	104	35	170	47	3.7	5.5	0	166	3.2	375
22...	244	106	37	180	48	3.8	5.7	0	171	4.2	385
22...	--	--	--	--	--	--	--	--	--	--	--
29...	243	106	37	185	49	3.9	5.5	0	172	4.2	385
FEB											
05...	243	110	35	190	49	4.0	6.1	0	177	4.4	390
12...	214	95	32	155	47	3.5	5.8	0	156	3.8	345
14...	--	--	--	--	--	--	--	--	--	--	--
19...	204	90	32	135	45	3.1	5.6	0	151	2.9	320
26...	212	91	32	135	45	3.1	5.6	0	148	2.3	330
27...	--	--	--	--	--	--	--	--	--	--	--
MAR											
05...	206	89	31	130	44	3.0	5.3	0	144	3.5	315
12...	208	91	31	130	44	3.0	5.2	0	148	3.6	315
13...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)
OCT											
02...	125	.5	8.5	832	827	--	--	.11	.50	--	--
09...	122	.5	9.5	820	821	--	--	.05	.20	--	--
16...	128	.5	9.5	848	851	--	--	.11	.50	--	--
18...	--	--	--	--	--	12	.08	--	--	.01	--
23...	118	.4	8.2	806	803	--	--	.29	1.3	--	--
30...	175	.5	13	1030	1030	10	.16	.21	.90	.01	.00
NOV											
06...	138	.5	9.9	876	875	--	--	.16	.70	--	--
13...	140	.5	12	880	890	--	--	.16	.70	--	--
15...	--	--	--	--	--	21	.14	--	--	.01	.00
20...	140	.4	12	890	890	--	--	.16	.70	--	--
27...	160	.4	10	972	968	--	--	.14	.60	--	--
28...	--	--	--	--	--	7	.17	.21	.90	.01	.01
DEC											
04...	160	.5	9.5	958	959	--	--	.16	.70	--	--
06...	--	--	--	--	--	13	.13	--	--	.01	.02
11...	128	.4	8.0	832	832	--	--	.16	.70	--	--
18...	130	.4	8.5	844	842	--	--	.16	.70	--	--
19...	--	--	--	--	--	6	.07	.19	.80	.01	.00
25...	175	.5	11	1020	1020	--	--	.14	.60	--	--
JAN											
01...	150	.6	10	936	927	--	--	.16	.70	--	--
08...	164	.5	9.5	960	952	--	--	.23	1.0	--	--
10...	--	--	--	--	--	7	.21	.16	.71	.01	.00
15...	160	.5	9.0	966	960	--	--	.18	.80	--	--
22...	170	.4	10	1010	997	--	--	.20	.90	--	--
22...	--	--	--	--	--	1	.20	.17	.75	.00	.01
29...	178	.5	12	1020	1010	--	--	.18	.80	--	--
FEB											
05...	185	.6	12	1060	1040	--	--	.16	.70	--	--
12...	140	.5	10	886	878	--	--	.20	.90	--	--
14...	--	--	--	--	--	43	.12	.23	1.0	.02	.01
19...	118	.5	9.2	802	802	--	--	.16	.70	--	--
26...	120	.4	10	812	814	--	--	.14	.60	--	--
27...	--	--	--	--	--	57	.13	.17	.75	.02	.00
MAR											
05...	115	.4	9.0	778	782	--	--	.16	.70	--	--
12...	118	.5	10	792	791	--	--	.20	.90	--	--
13...	--	--	--	--	--	39	.12	.12	.53	.02	.00
14...	--	--	--	--	--	--	--	--	--	--	--

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT										
02...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
18...	--	.09	--	.00	.40	.40	.49	.03	--	--
23...	--	--	--	--	--	--	--	--	--	--
30...	.00	.17	.21	.00	.32	.32	.49	.02	--	.00
NOV										
06...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
15...	.00	.15	.16	.00	.48	.48	.63	.03	.00	.04
20...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
28...	.03	.18	.22	.01	.54	.55	.73	.02	--	.00
DEC										
04...	--	--	--	--	--	--	--	--	--	--
06...	.07	.14	.23	.01	.47	.48	.62	.02	--	.01
11...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
19...	.00	.08	.19	.01	.33	.34	.42	.02	--	.00
25...	--	--	--	--	--	--	--	--	--	--
JAN										
01...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
10...	.00	.22	.16	.00	.23	.23	.45	.03	--	.00
15...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	.03	.20	.18	.00	.23	.23	.43	.02	--	.00
29...	--	--	--	--	--	--	--	--	--	--
FEB										
05...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
14...	.03	.14	.24	.01	.60	.61	.75	.05	.12	.10
19...	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--
27...	.03	.15	.18	.02	.37	.39	.54	.02	--	.00
MAR										
05...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
13...	.00	.14	.12	.01	.33	.34	.48	.01	--	.00
14...	--	--	--	--	--	--	--	--	--	--

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
MAR											
19...	--	--	1230	7.8	--	14	--	--	--	--	350
27...	1150	7550	--	--	19.5	--	--	14	--	--	--
APR											
02...	--	--	1250	7.9	--	4.0	--	--	--	--	350
09...	--	--	1190	8.1	--	3.0	--	--	--	--	345
11...	0900	10800	1190	8.0	17.0	--	9.2	14	15	--	--
16...	--	--	1220	7.9	--	9.0	--	--	--	--	350
23...	--	--	1250	7.9	--	4.0	--	--	--	--	360
24...	1015	11100	--	--	22.0	--	--	25	--	--	--
30...	--	--	1270	8.0	--	3.0	--	--	--	--	360
MAY											
07...	--	--	1270	8.0	--	4.0	--	--	--	--	360
09...	0930	11200	1310	7.9	19.0	--	8.6	16	33	--	--
14...	--	--	1270	7.9	--	4.0	--	--	--	--	360
21...	--	--	1250	7.9	--	2.0	--	--	--	--	360
22...	1020	11300	--	--	24.0	--	--	15	--	--	--
28...	--	--	1280	8.0	--	4.0	--	--	--	--	360
JUN											
04...	--	--	1260	8.0	--	1.0	--	--	--	--	355
11...	--	--	1270	8.0	--	1.0	--	--	--	--	360
13...	0915	--	--	--	--	--	--	--	20	--	--
18...	--	--	1240	8.0	--	2.0	--	--	--	--	355
25...	--	--	1230	8.0	--	1.0	--	--	--	--	350
26...	1130	13000	--	--	27.0	--	--	27	--	--	--
JUL											
02...	--	--	1240	7.9	--	100	--	--	--	--	355
09...	--	--	1220	8.1	--	100	--	--	--	--	350
11...	0905	12800	1280	8.0	27.0	--	7.1	14	27	24	--
16...	--	--	1220	8.1	--	200	--	--	--	--	355
23...	--	--	1260	8.2	--	100	--	--	--	--	355
24...	1045	11100	--	--	30.5	--	--	12	--	--	--
30...	--	--	1240	8.0	--	2.0	--	--	--	--	370
AUG											
06...	--	--	1240	8.0	--	1.0	--	--	--	--	360
08...	0930	13500	1290	7.9	29.0	--	6.0	16	67	33	--
13...	--	--	1200	8.0	--	1.0	--	--	--	--	340
20...	--	--	1300	8.2	--	4.0	--	--	--	--	370
20...	1130	9240	--	--	27.5	--	--	13	--	--	--
27...	--	11400	1210	8.1	--	1.0	--	--	--	--	340
SEP											
03...	--	--	1210	8.1	--	2.0	--	--	--	--	340

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)
MAR											
19...	206	90	31	130	44	3.0	5.2	0	144	4.5	315
27...	--	--	--	--	--	--	--	--	--	--	--
APR											
02...	204	90	31	135	45	3.1	5.0	0	146	3.6	320
09...	202	85	32	120	43	2.8	5.4	0	143	2.2	305
11...	--	--	--	--	--	--	--	--	--	--	--
16...	202	90	31	125	43	2.9	5.1	--	148	3.6	315
23...	230	94	31	130	43	3.0	5.1	0	130	3.2	320
24...	--	--	--	--	--	--	--	--	--	--	--
30...	214	93	31	135	44	3.1	5.3	0	146	2.8	330
MAY											
07...	214	88	34	135	44	3.1	5.6	0	146	2.8	330
09...	--	--	--	--	--	--	--	--	--	--	--
14...	212	90	33	135	44	3.1	5.5	0	148	3.6	330
21...	212	91	32	130	44	3.0	5.4	0	148	3.6	320
22...	--	--	--	--	--	--	--	--	--	--	--
28...	209	94	31	135	44	3.1	5.5	0	151	2.9	325
JUN											
04...	204	92	31	135	45	3.1	5.4	0	151	2.9	320
11...	214	94	31	135	44	3.1	5.6	0	146	2.8	330
13...	--	--	--	--	--	--	--	--	--	--	--
18...	210	90	32	130	44	3.0	5.5	0	144	2.8	320
25...	206	90	31	130	44	3.0	5.2	0	144	2.8	320
26...	--	--	--	--	--	--	--	--	--	--	--
JUL											
02...	210	90	32	130	44	3.0	5.5	0	144	3.5	320
09...	202	90	31	125	43	2.9	5.2	0	148	2.3	315
11...	--	--	--	--	--	--	--	--	--	--	--
16...	209	89	32	125	43	2.9	5.6	0	146	2.3	315
23...	208	92	31	135	45	3.1	5.8	0	148	1.8	320
24...	--	--	--	--	--	--	--	--	--	--	--
30...	370	90	35	140	45	3.2	5.2	0	143	2.8	305
AUG											
06...	219	97	29	140	45	3.2	4.8	0	141	2.8	300
08...	--	--	--	--	--	--	--	--	--	--	--
13...	200	95	25	130	45	3.1	4.8	0	139	2.7	300
20...	219	91	35	155	47	3.5	4.2	0	151	1.9	335
20...	--	--	--	--	--	--	--	--	--	--	--
27...	192	86	31	125	44	2.9	6.0	0	148	2.3	310
SEP											
03...	200	88	29	130	45	3.1	4.0	0	139	2.2	310

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)
MAR											
19...	115	.5	9.0	784	784	--	--	.18	.80	--	--
27...	--	--	--	--	--	14	.11	.12	.53	.02	.00
APR											
02...	118	.4	12	796	800	--	--	.07	.30	--	--
09...	110	.4	12	754	756	--	--	.05	.20	--	--
11...	--	--	--	--	--	36	.02	.05	.22	.00	.01
16...	110	.4	10	772	776	--	--	.07	.30	--	--
23...	120	.1	10	838	789	--	--	.05	.20	--	--
24...	--	--	--	--	--	15	.02	.01	.04	.00	.00
30...	118	.6	11	808	812	--	--	.02	.10	--	--
MAY											
07...	118	.4	11	816	810	--	--	.02	.10	--	--
09...	--	--	--	--	--	20	.00	.00	.00	.02	.00
14...	118	.3	11	810	812	--	--	.05	.20	--	--
21...	118	.4	11	796	797	--	--	.02	.10	--	--
22...	--	--	--	--	--	27	.05	.00	.00	.00	.01
28...	121	.5	11	816	814	--	--	.07	.30	--	--
JUN											
04...	118	.5	11	800	804	--	--	.02	.10	--	--
11...	118	.4	10	808	812	--	--	.09	.40	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
18...	115	.5	10	786	790	--	--	.11	.50	--	--
25...	112	.4	9.2	780	785	--	--	.09	.40	--	--
26...	--	--	--	--	--	32	.08	.07	.31	.02	.00
JUL											
02...	115	.5	11	780	792	--	--	.11	.50	--	--
09...	110	.4	12	768	778	--	--	.09	.40	--	--
11...	--	--	--	--	--	31	.10	.04	.18	.02	.00
16...	110	.5	12	774	777	--	--	.07	.30	--	--
23...	120	.5	11	788	804	--	--	--	--	--	--
24...	--	--	--	--	--	24	.00	.07	.31	.08	.01
30...	114	.5	11	793	788	--	--	.18	.80	--	--
AUG											
06...	112	.5	12	786	780	--	--	.02	.10	--	--
08...	--	--	--	--	--	25	.05	.10	.44	.02	.00
13...	109	.4	10	780	759	--	--	.07	.30	--	--
20...	124	.5	10	828	846	--	--	.14	.60	--	--
20...	--	--	--	--	--	30	.04	.10	.44	.02	.01
27...	112	.3	10	780	770	--	--	.07	.30	--	--
SEP											
03...	110	.6	11	786	764	--	--	.09	.40	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
MAR										
19...	--	--	--	--	--	--	--	--	--	--
27...	.03	.13	.13	.02	.19	.21	.34	.02	--	.00
APR										
02...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
11...	.03	.02	.06	.01	.42	.43	.45	.05	--	.00
16...	--	--	--	--	--	--	--	--	--	--
23...	--	--	.00	--	--	--	--	--	--	--
24...	.00	.02	.01	.04	.68	.72	.74	.04	--	.02
30...	--	--	--	--	--	--	--	--	--	--
MAY										
07...	--	--	--	--	--	--	--	--	--	--
09...	.00	.01	.00	.00	.49	.49	.50	.04	.01	.00
14...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
22...	.03	.05	.01	.03	.39	.42	.47	.04	--	.02
28...	--	--	--	--	--	--	--	--	--	--
JUN										
04...	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--
26...	.00	.10	.07	.03	.37	.40	.50	.00	--	.00
JUL										
02...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
11...	.00	.12	.04	.03	.08	.11	.23	.04	--	.01
16...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
24...	.03	.05	.08	.01	.68	.69	.74	.08	--	.04
30...	--	--	--	--	--	--	--	--	--	--
AUG										
06...	--	--	--	--	--	--	--	--	--	--
08...	.00	.07	.10	.01	.38	.39	.46	.07	.04	.03
13...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
20...	.03	.06	.11	.05	.38	.43	.49	.07	--	.03
27...	--	--	--	--	--	--	--	--	--	--
SEP										
03...	--	--	--	--	--	--	--	--	--	--

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
SEP											
10...	--	--	1240	--	--	--	--	--	--	--	330
12...	0920	10600	1250	7.6	28.0	--	7.6	21	34	45	--
17...	--	--	1230	8.1	--	4.5	--	--	--	--	360
24...	--	--	1250	8.0	--	2.6	--	--	--	--	340
25...	1045	10430	--	--	26.5	--	--	17	--	--	--

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	SODIUM+POTASSIUM DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
SEP											
10...	190	84	28	130	46	3.1	140	5.6	--	140	--
12...	--	--	--	--	--	--	--	--	--	--	--
17...	320	89	32	130	44	3.0	--	4.0	0	139	2.2
24...	200	86	30	130	45	3.1	--	4.0	0	139	2.7
25...	--	--	--	--	--	--	--	--	--	--	--

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)	NITROGEN, NITRITE TOTAL (MG/L AS N)
SEP											
10...	330	120	.5	10	837	793	--	--	--	--	--
12...	--	--	--	--	--	--	15	.12	.11	.49	.00
17...	310	110	.1	12	816	772	--	--	.16	.70	--
24...	320	120	.4	11	790	784	--	--	.11	.50	--
25...	--	--	--	--	--	--	12	.13	.12	.53	.02

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS NO2)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)
SEP										
10...	--	--	--	.08	--	--	--	--	--	--
12...	.01	.03	.12	.12	.15	.23	.38	.50	.02	.01
17...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
25...	.01	.03	.15	.13	.03	.31	.34	.49	.01	.01

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
OCT												
18...	0830	--	--	--	180	--	--	--	--	--	--	--
30...	1100	--	--	--	260	--	--	--	--	--	--	--
NOV												
15...	0940	3	--	2	180	0	0	0	0	0	0	0
28...	1120	--	--	--	230	--	--	--	--	--	--	--
DEC												
06...	0900	--	--	--	210	--	--	--	--	--	--	--
19...	1000	--	--	--	180	--	--	--	--	--	--	--
JAN												
10...	0905	--	--	--	240	--	--	--	--	--	--	--
22...	0900	--	--	--	310	--	--	--	--	--	--	--
FEB												
14...	0900	2	0	2	180	0	0	0	0	0	0	0
27...	1020	--	--	--	170	--	--	--	--	--	--	--
MAR												
13...	0800	--	--	--	170	--	--	--	--	--	--	--
27...	1150	--	--	--	190	--	--	--	--	--	--	--
APR												
11...	0900	--	--	--	190	--	--	--	--	--	--	--
23...	--	--	--	--	190	--	--	--	--	--	--	--
24...	1015	--	--	--	190	--	--	--	--	--	--	--
MAY												
09...	0930	3	3	2	190	2	2	0	0	0	0	0
22...	1020	--	--	--	170	--	--	--	--	--	--	--
JUN												
26...	1130	--	--	--	170	--	--	--	--	--	--	--
JUL												
11...	0905	--	--	--	190	--	--	--	--	--	--	--
24...	1045	--	--	--	200	--	--	--	--	--	--	--
AUG												
08...	0930	3	0	3	180	0	0	<1	0	0	0	0
20...	1130	--	--	--	190	--	--	--	--	--	--	--
SEP												
12...	0920	--	--	--	180	--	--	--	--	--	--	--
25...	1045	--	--	--	180	--	--	--	--	--	--	--

< Actual value is known to be less than the value shown.

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT												
18...	--	--	--	--	--	190	--	--	--	--	--	--
30...	--	--	--	--	--	340	--	--	--	--	--	--
NOV												
15...	0	0	2	1	1	420	400	20	2	2	0	30
28...	--	--	--	--	--	350	--	--	--	--	--	--
DEC												
06...	--	--	--	--	--	160	--	--	--	--	--	--
19...	--	--	--	--	--	370	--	--	--	--	--	--
JAN												
10...	--	--	--	--	--	210	--	--	--	--	--	--
22...	--	--	--	--	--	180	--	--	--	--	--	--
FEB												
14...	0	<3	5	2	3	780	770	10	15	13	2	80
27...	--	--	--	--	--	350	--	--	--	--	--	--
MAR												
13...	--	--	--	--	--	670	--	--	--	--	--	--
27...	--	--	--	--	--	270	--	--	--	--	--	--
APR												
11...	--	--	--	--	--	630	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	<0	--	--	--	--
24...	--	--	--	--	--	350	--	--	--	--	--	--
MAY												
09...	0	0	2	2	0	470	460	10	32	32	0	50
22...	--	--	--	--	--	470	--	--	--	--	--	--
JUN												
26...	--	--	--	--	--	570	--	--	--	--	--	--
JUL												
11...	--	--	--	--	--	580	--	--	--	--	--	--
24...	--	--	--	--	--	340	--	--	--	--	--	--
AUG												
08...	0	<3	3	0	7	400	390	<10	19	19	0	50
20...	--	--	--	--	--	550	--	--	--	--	--	--
SEP												
12...	--	--	--	--	--	380	--	--	--	--	--	--
25...	--	--	--	--	--	360	--	--	--	--	--	--

DATE	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
OCT											
16...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
NOV											
15...	30	5	.0	.0	.0	5	0	5	10	0	10
28...	--	--	--	--	--	--	--	--	--	--	--
DEC											
06...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
JAN											
10...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
FEB											
14...	70	8	1.1	.0	1.1	2	0	3	20	20	4
27...	--	--	--	--	--	--	--	--	--	--	--
MAR											
13...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
APR											
11...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
MAY											
09...	40	10	.2	.2	.0	3	0	3	40	20	20
22...	--	--	--	--	--	--	--	--	--	--	--
JUN											
26...	--	--	--	--	--	--	--	--	--	--	--
JUL											
11...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
AUG											
08...	50	5	.1	.1	.0	2	0	2	20	20	<3
20...	--	--	--	--	--	--	--	--	--	--	--
SEP											
12...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--

< Actual value is known to be less than the value shown.

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
NOV											
15...	0940	5780	1330	8.0	15.0	<12	.5	4.3	1.6	4.0	1.6
MAY											
09...	0930	11200	1310	7.9	19.0	<16	.4	<4.9	.7	<4.5	.7

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT						
17...	0830	--	--	--	.00	.0
18...	0830	4.0	--	--	--	--
30...	1100	3.8	--	--	--	--
NOV						
15...	0940	--	3.1	.8	.00	.0
28...	1120	3.1	--	--	--	--
DEC						
06...	0900	3.5	--	--	.00	.0
19...	1000	2.7	--	--	--	--
JAN						
10...	0905	32	--	--	--	.0
22...	0900	3.9	--	--	--	--
FEB						
14...	0900	--	3.2	1.0	--	.0
27...	1020	4.1	--	--	--	--
MAR						
13...	0800	4.4	--	--	--	--
14...	0830	--	--	--	--	.0
27...	1150	3.6	--	--	--	--
APR						
11...	0900	5.1	--	--	--	.0
24...	1015	4.0	--	--	--	--
MAY						
09...	0930	--	3.5	.9	--	.0
22...	1020	3.9	--	--	--	--
JUN						
13...	0915	--	--	--	--	.0
26...	1130	4.6	--	--	--	--
JUL						
11...	0905	4.4	--	--	--	--
24...	1045	4.5	--	--	--	.0
AUG						
08...	0930	4.0	--	--	--	.0
20...	1130	4.0	--	--	--	--
SEP						
12...	0920	3.3	--	--	--	.0
25...	1045	3.0	--	--	--	--

< Actual value is known to be less than the value shown.

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

CHEMICAL ANALYSES. WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ALDRIN. TOTAL (UG/L)	CHLOR-DANE. TOTAL (UG/L)	DDD. TOTAL (UG/L)	DDE. TOTAL (UG/L)	DDT. TOTAL (UG/L)	DI-AZINON. TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN. TOTAL (UG/L)
OCT 17...	0830	.00	.0	.00	.00	.00	.00	.00	.00
NOV 15...	0940	.00	.0	.00	.00	.00	.00	.00	.00
DEC 06...	0900	.00	.0	.00	.00	.00	.00	.00	.00
JAN 10...	0905	.00	.0	.00	.00	.00	.00	.00	.00
FEB 14...	0900	.00	.0	.00	.00	.00	.00	.00	.00
MAR 14...	0830	.00	.0	.00	.00	.00	.00	.00	.00
APR 11...	0900	.00	.0	.00	.00	.00	.00	.00	.00
MAY 09...	0930	.00	.0	.00	.00	.00	.00	.00	.00
JUN 13...	0915	.00	.0	.00	.00	.00	.00	.00	.00
JUL 24...	1045	.00	.0	.00	.00	.00	.00	.00	.00
AUG 08...	0930	.00	.0	.00	.00	.00	.00	.00	.00
SEP 12...	0920	.00	.0	.00	.00	.00	.00	.00	.00

DATE	ENDRIN. TOTAL (UG/L)	ETHION. TOTAL (UG/L)	HEPTA-CHLOR. TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION. TOTAL (UG/L)	METH-OXY-CHLOR. TOTAL (UG/L)	METHYL PARA-THION. TOTAL (UG/L)	METHYL TRI-THION. TOTAL (UG/L)
OCT 17...	.00	.00	.00	.00	.00	.00	--	.00	.00
NOV 15...	.00	.00	.00	.00	.00	.00	--	.00	.00
DEC 06...	.00	.00	.00	.00	.00	.00	--	.00	.00
JAN 10...	.00	.00	.00	.00	.00	.00	--	.00	.00
FEB 14...	.00	.00	.00	.00	.00	.00	--	.00	.00
MAR 14...	.00	.00	.00	.00	.00	.00	--	.00	.00
APR 11...	.00	.00	.00	.00	.00	.00	--	.00	.00
MAY 09...	.00	.00	.00	.00	.00	.00	--	.00	.00
JUN 13...	.00	.00	.00	.00	.00	.00	--	.00	.00
JUL 24...	.00	.00	.00	.00	.00	.00	--	.00	.00
AUG 08...	.00	.00	.00	.00	.00	.00	--	.00	.00
SEP 12...	.00	.00	.00	.00	.00	.00	.00	.00	.00

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MIREX, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)
OCT								
17...	.00	.00	.00	.00	0	.00	.00	.00
NOV								
15...	.00	.00	.00	.00	0	.00	.00	.00
DEC								
06...	.00	.00	.00	.00	0	.00	.00	.00
JAN								
10...	.00	.00	.00	.00	0	.00	.00	.00
FEB								
14...	.00	.00	.00	.00	0	.00	.00	.00
MAR								
14...	.00	.00	.00	.00	0	.00	.01	.00
APR								
11...	.00	.00	.00	.00	0	.00	.02	.00
MAY								
09...	.00	.00	.00	.00	0	.00	.00	.00
JUN								
13...	.00	.00	.00	.00	0	.00	.00	.00
JUL								
24...	.00	.00	.00	.00	0	.00	.00	.00
AUG								
08...	.00	.00	.00	.00	0	.00	.00	.00
SEP								
12...	.00	.00	.00	.00	0	.00	.00	.00

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	NOV 15,78	FEB 14,79	MAY 9,79	JUN 13,79
TIME	0940	0900	0930	0915
TOTAL CELLS/ML	1200	1100	85000	5900
DIVERSITY: DIVISION	1.0	1.7	0.4	0.6
.CLASS	1.0	1.7	0.4	0.7
..ORDER	2.0	2.3	0.4	0.8
...FAMILY	2.5	2.6	0.4	0.9
....GENUS	0.0	2.8	0.8	1.2

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	--	-	--	-	--	-	130	2
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	--	-	--	-
...MICRACTINIACEAE								
....GOLENKINIA	--	-	--	-	--	-	--	-
....MICRACTINIUM	14	1	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	72	6	*	0	*	0	100	2
....CHODATELLA	14	1	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	*	0	--	-
....FRANCEIA	--	-	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-
....TETRAEDRON	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....ACTINASTRUM	--	-	--	-	--	-	--	-
....CRUCIGENIA	120	10	--	-	--	-	--	-
....SCENEDESMUS	360#	30	260#	22	--	-	67	1
....TETRASTRUM	--	-	--	-	--	-	130	2
..TETRASPORALES								
...PALMELLACEAE								
....SPHAEROCYSTIS	--	-	--	-	1600	2	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE	43	4	--	-	--	-	--	-
....CARTERIA	14	1	--	-	--	-	--	-
....CHLAMYDOMONAS	43	4	--	-	--	-	67	1
...POLYBLEPHARIDACEAE								
....SPERMATOZOOPSIS	--	-	--	-	*	0	--	-
..ZYGNEMATALES								
...DESMIDIACEAE								
....CLOSTERIUM	43	4	--	-	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	200#	17	35	3	2500	3	270	5
....MELOSIRA	86	7	--	-	630	1	4900#	82
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	14	1	--	-	--	-	--	-
...FRAGILARIACEAE								
....FRAGILARIA	--	-	*	0	--	-	--	-
....SYNEDRA	58	5	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	--	-	80	7	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	100	8	140	12	*	0	67	1
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...OCHROMONADACEAE								
....DINOBRYON	--	-	--	-	--	-	100	2
....OCHROMONAS	--	-	*	0	--	-	--	-
.XANTHOPHYCEAE								
..HETEROCOCCALES								
...CHLOROTHECIACEAE								
....OPHIOCYTIUM	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	--	-	--	-	*	0	130	2
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	10	1	--	-	--	-

See footnotes at end of table.

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	NOV 15,78		FEB 14,79		MAY 9,79		JUN 13,79	
TIME	0940		0900		0930		0915	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	270#	23	--	-	--	-
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENOPSIS	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE								
....LYNGBYA	--	-	--	-	4900	6	--	-
....OSCILLATORIA	--	-	250#	22	75000#	88	--	-
....SPIRULINA	--	-	65	6	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....TRACHELOMONAS	14	1	25	2	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..PERIDINIALES								
...GLENODINIACEAE								
....GLENODINIUM	--	-	--	-	--	-	--	-

DATE	JUL 11,79		AUG 8,79		SEP 12,79	
TIME	0905		0930		0920	
TOTAL CELLS/ML	6300		6800		6800	
DIVERSITY: DIVISION	0.9		0.8		1.3	
.CLASS	0.9		0.8		1.3	
..ORDER	1.8		1.0		1.6	
...FAMILY	2.1		1.4		1.9	
....GENUS	2.2		1.6		2.2	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...CHARACIACEAE						
....SCHROEDERIA	39	1	--	-	*	0
...COELASTRACEAE						
....COELASTRUM	190	3	150	2	110	2
...MICRACTINIACEAE						
....GOLENKINIA	51	1	--	-	--	-
....MICRACTINIUM	64	1	--	-	--	-
...OOCYSTACEAE						
....ANKISTRODESMUS	90	1	51	1	43	1
....CHODATELLA	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	110	2
....FRANCEIA	--	-	39	1	*	0
....OOCYSTIS	--	-	51	1	--	-
....SELENASTRUM	--	-	*	0	--	-
....TETRAEDRON	--	-	*	0	72	1
...SCENEDESMACEAE						
....ACTINASTRUM	--	-	--	-	57	1
....CRUCIGENIA	260	4	150	2	290	4
....SCENEDESMUS	260	4	440	6	1100#	16
....TETRASTRUM	--	-	100	2	--	-
..TETRASPORALES						
...PALMELLACEAE						
....SPHAEROCYSTIS	--	-	--	-	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE	--	-	--	-	--	-
....CARTERIA	--	-	--	-	72	1
....CHLAMYDOMONAS	*	0	51	1	*	0
...POLYBLEPHARIDACEAE						
....SPERMATOZOOPSIS	--	-	--	-	--	-
..ZYGNEMATALES						
...DESMIDIACEAE						
....CLOSTERIUM	--	-	--	-	--	-

See footnotes at end of table.

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	JUL 11,79		AUG 8,79		SEP 12,79	
TIME	0905		0930		0920	
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	130	2	51	1	230	3
....MELOSIRA	64	1	--	-	260	4
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	--	-
...FRAGILARIACEAE						
....FRAGILARIA	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	--	-
...NAVICULACEAE						
....NAVICULA	*	0	--	-	--	-
...NITZSCHIACEAE						
....NITZSCHIA	77	1	100	2	160	2
.CHRYSOPHYCEAE						
..CHRYSOMONADALES						
...OCHROMONADACEAE						
....DINOBRYON	--	-	--	-	--	-
....OCHROMONAS	--	-	--	-	--	-
.XANTHOPHYCEAE						
..HETEROCOCCALES						
...CHLOROTHECIACEAE						
....OPHIOCYTIUM	*	0	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)						
.CRYPTOPHYCEAE						
..CRYPTOMONADALES						
...CRYPTOCHRYSIDACEAE						
....CHROOMONAS	--	-	*	0	--	-
...CRYPTOMONADACEAE						
....CRYPTOMONAS	--	-	*	0	*	0
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....ANACYSTIS	1900#	30	51	1	4000#	59
..HORMOGONALES						
...NOSTOCACEAE						
....ANABAENOPSIS	--	-	260	4	200	3
...OSCILLATORIACEAE						
....LYNGBYA	--	-	--	-	--	-
....OSCILLATORIA	3100#	49	5100#	76	--	-
....SPIRULINA	--	-	64	1	--	-
EUGLENOPHYTA (EUGLENOIDS)						
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....TRACHELOMONAS	*	0	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)						
.DINOPHYCEAE						
..PERIDINIALES						
...GLENODINIACEAE						
....GLENODINIUM	--	-	*	0	*	0

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PERIPHYTON

DATE	TIME	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M
NOV					
15...	0940	52.6	.000	132	122
MAY					
09...	0930	.990	.000	18.2	17.7

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1310	1600	1640	1460	1570	1280	1240	1280	1290	1230	1240	1240
2	1300	1540	1620	1540	1580	1290	1250	1290	1290	1240	1250	1240
3	1290	1430	1550	1420	1590	1310	1270	1270	1280	1250	1250	1230
4	1270	1400	1510	1380	1610	1320	1250	1280	1260	1240	1260	1210
5	1260	1410	1460	1360	1630	1230	1260	1270	1270	1230	1240	1220
6	1290	1370	1400	1370	1570	1260	1270	1270	1240	1230	1250	1230
7	1310	1320	1380	1430	1530	1260	1240	1270	1250	1260	1220	1250
8	1320	1320	1350	1500	1550	1270	1220	1240	1280	1240	1240	1250
9	1290	1320	1330	1520	1570	1280	1190	1270	1310	1220	1260	1260
10	1280	1320	1340	1550	1460	1310	1210	1280	---	1220	1240	1240
11	1270	1370	1310	1470	1410	1310	1220	1320	1270	1240	1240	1230
12	1280	1400	1310	1550	1380	1240	1230	1310	1270	1250	1190	1220
13	1300	1390	1290	1600	1310	1230	1250	1290	1240	1250	1200	1210
14	1340	1380	1280	1610	1300	1240	1240	1270	1250	1250	1210	1270
15	1340	1310	1270	1510	1260	1260	1230	1270	1250	1240	1300	1260
16	1340	1310	1290	1420	1260	1240	1220	1280	1250	1220	1310	1230
17	1310	1290	1330	1410	1240	1240	1230	1270	1250	1240	1260	1230
18	1300	1310	1320	1390	1280	1250	1260	1280	1240	1230	1230	1220
19	1300	1360	1300	1370	1260	1230	1270	1280	1260	1230	1300	1220
20	1330	1390	1320	1410	1240	1240	1270	1250	1260	1230	1300	1230
21	1330	1390	1400	1500	1240	1230	1270	1250	1270	1230	1280	1240
22	1340	1380	1480	1570	1250	1230	1250	1260	1270	1210	1260	1250
23	1260	1370	1500	1570	1270	1230	1250	1270	1270	1260	1260	1250
24	1310	1420	1560	1560	1290	1270	1250	1270	1230	1250	1260	1250
25	1370	1460	1590	1560	1290	1260	1250	1290	1230	1250	1240	1260
26	1430	1490	1570	1570	1280	1260	1250	1310	1240	1260	1230	1230
27	1490	1520	1440	1600	1280	1270	1270	1320	1260	1270	1210	1250
28	1570	1550	1480	1600	1280	1250	1290	1280	1260	1280	1220	1260
29	1620	1600	1370	1590	---	1240	1280	1290	1250	1250	1220	1260
30	1610	1630	1400	1580	---	1240	1270	1280	1270	1240	1220	1270
31	1630	---	1400	1570	---	1260	---	1270	---	1230	1240	---
MONTH	1350	1410	1410	1500	1390	1260	1250	1280	1260	1240	1250	1240
YEAR	MAX	1640	MIN	1190	MEAN	1320						

09429490 COLORADO RIVER ABOVE IMPERIAL DAM. AZ-CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
INSTANTANEOUS OBSERVATIONS AT 1230

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.0	22.0	15.0	11.5	11.5	16.0	19.5	23.5	27.0	29.5	31.0	29.0
2	29.0	23.0	15.5	10.5	13.0	15.5	20.5	22.0	27.0	28.5	31.0	29.0
3	29.0	21.5	15.0	9.0	13.5	15.5	19.5	23.0	28.0	28.5	30.5	29.0
4	28.5	22.0	14.5	9.0	13.0	16.0	19.5	23.5	28.0	28.5	30.5	29.0
5	28.5	22.0	15.0	10.0	11.5	16.0	20.0	24.5	28.0	28.0	30.0	29.0
6	28.5	22.0	13.5	10.5	12.0	16.5	20.0	24.0	28.0	28.0	30.0	29.5
7	28.5	21.5	11.5	11.5	13.0	14.0	21.0	23.0	27.0	28.5	30.0	30.5
8	28.5	21.5	10.5	12.0	13.5	19.0	21.0	21.5	26.5	29.0	31.0	30.5
9	28.5	21.5	10.5	13.5	14.5	19.5	21.0	21.0	26.5	29.0	31.0	30.5
10	28.0	21.0	9.5	13.5	14.5	19.0	20.0	21.0	26.5	29.0	30.5	30.5
11	27.0	20.5	10.5	13.0	15.0	19.5	19.5	22.0	27.0	29.0	30.5	30.5
12	26.5	19.5	11.0	13.0	15.0	19.0	19.5	23.5	28.0	29.5	29.5	30.0
13	26.5	18.5	11.5	13.5	15.5	19.0	20.5	24.0	30.0	29.5	29.5	30.0
14	25.5	18.5	12.0	13.5	15.5	19.5	21.5	25.0	30.0	29.5	29.5	30.0
15	26.0	17.0	12.0	13.5	14.5	20.0	22.0	24.5	30.0	29.5	30.0	29.5
16	25.5	18.0	12.0	13.5	15.0	18.5	22.0	25.0	28.5	30.5	29.5	28.0
17	25.5	16.5	13.5	13.5	15.0	17.0	22.0	24.5	26.5	30.5	29.5	28.0
18	26.0	16.5	13.5	14.0	14.5	16.5	21.5	25.0	26.5	30.5	28.5	28.5
19	26.0	16.5	13.5	13.5	14.5	16.5	21.5	25.5	25.5	30.5	29.0	28.5
20	24.5	18.0	13.5	13.0	14.5	16.5	21.5	25.0	26.0	29.5	28.5	29.0
21	24.0	18.0	12.0	13.0	14.5	16.5	22.0	25.0	27.0	30.0	29.0	29.0
22	24.5	18.0	13.0	13.5	15.0	17.0	23.0	25.0	27.0	30.5	30.0	29.0
23	23.5	18.0	12.0	13.5	15.0	18.0	23.0	26.5	28.0	30.5	30.0	29.0
24	22.0	16.5	11.0	13.5	14.5	19.0	23.5	26.5	28.5	31.5	29.5	28.5
25	23.0	16.0	12.0	13.5	14.5	19.5	23.5	26.5	28.5	31.0	30.0	29.0
26	23.5	16.5	12.0	13.0	15.0	20.5	23.5	26.5	29.0	31.0	29.5	28.5
27	23.5	15.5	13.0	13.0	15.5	20.5	23.5	26.5	29.5	31.5	29.0	29.0
28	23.5	15.0	13.5	12.0	16.0	20.0	24.0	26.5	29.5	31.5	29.0	28.5
29	23.5	15.0	14.0	11.5	---	18.5	24.5	26.5	30.0	31.0	29.0	29.0
30	23.5	15.0	14.0	11.5	---	18.5	24.5	26.5	30.0	31.0	29.0	28.5
31	23.0	---	13.0	11.5	---	19.0	---	26.5	---	31.0	29.0	---
MONTH	26.0	18.5	12.5	12.5	14.5	18.0	21.5	24.5	28.0	30.0	30.0	29.0
YEAR	MAX	31.5	MIN	9.0	MEAN	22.0						

09429600 COLORADO RIVER BELOW LAGUNA DAM, AZ-CA

LOCATION.--Lat 32°48'44", long 114°30'51", in SE¼NE¼ sec.35, T.15 S., R.24 E., San Bernardino meridian, in California, Imperial County, Hydrologic Unit 15030107, on right bank 1.4 mi (2.3 km) downstream from Laguna Dam, 2.8 mi (4.5 km) northeast of Bard, Calif., and 10 mi (16 km) northeast of Yuma, Ariz.

DRAINAGE AREA.--188,600 mi² (488,500 km²), approximately, including 3,959 mi² (10,254 km²) in Great Divide basin in southern Wyoming, which is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 120.84 ft (36.832 m) National Geodetic Vertical Datum of 1929 (Bureau of Reclamation bench mark).

REMARKS.--Records good prior to February and fair thereafter. Natural flow of Colorado River at this point is affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation, municipal, and industrial uses, and return flows from irrigated areas. Flow past station consists mainly of water released through Imperial Dam, sludge from the desilting basins at Imperial Dam, seepage through Imperial Dam, and seepage from the All-American Canal and the Gila Gravity Main Canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,030 ft³/s (142 m³/s) Aug. 18, 1977, gage height, 12.88 ft (3.926 m); minimum daily, 71 ft³/s (2.01 m³/s) May 29, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,840 ft³/s (80.4 m³/s) Dec. 19, gage height, 9.02 ft (2.749 m); minimum daily, 130 ft³/s (3.68 m³/s) Feb. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	276	545	751	178	147	242	363	379	324	247	395	428
2	253	574	666	180	144	332	363	369	333	280	390	417
3	248	573	422	183	142	427	351	364	353	305	417	417
4	253	512	314	185	140	456	431	358	395	324	422	486
5	324	485	304	187	140	580	483	379	400	333	516	510
6	401	604	299	185	130	528	471	400	406	328	641	468
7	287	614	295	180	144	556	474	395	400	353	560	486
8	258	583	290	176	240	578	472	428	364	541	451	358
9	256	542	287	172	207	497	477	417	333	741	374	358
10	261	467	286	169	149	352	459	343	309	428	400	358
11	271	297	285	166	147	290	440	300	277	400	390	374
12	287	283	281	163	149	216	424	277	260	379	445	374
13	282	277	274	158	151	210	401	255	498	384	400	439
14	282	277	271	157	151	223	401	282	620	364	445	434
15	279	272	244	156	156	236	422	328	374	348	486	390
16	282	272	253	168	187	250	433	358	364	358	704	468
17	288	284	257	155	225	248	420	374	364	353	634	647
18	275	291	796	807	222	246	416	369	364	358	445	606
19	276	288	2560	1390	238	234	415	350	358	358	676	516
20	280	285	1450	1170	225	228	429	498	369	390	627	445
21	656	278	351	1490	227	244	447	779	379	374	428	462
22	1200	277	284	1140	225	244	598	428	353	379	434	486
23	1440	275	275	719	227	255	462	348	338	374	498	554
24	1720	283	270	501	235	297	324	374	328	369	573	600
25	1950	255	268	870	232	306	353	384	300	474	417	529
26	1210	247	373	782	240	332	411	328	268	661	406	462
27	649	1020	579	836	245	348	593	338	247	451	400	439
28	536	685	518	972	242	351	474	348	260	388	395	422
29	461	675	391	493	---	358	439	348	243	348	445	451
30	461	732	220	179	---	373	456	328	230	434	498	468
31	467	---	173	155	---	367	---	338	---	522	480	---
TOTAL	16369	13052	14287	14422	5307	10308	13182	11572	10411	12246	14792	13772
MEAN	528	435	461	465	190	333	437	373	347	395	477	459
MAX	1950	1020	2560	1490	240	578	598	779	620	741	704	647
MIN	248	247	173	155	130	210	324	255	230	247	374	358
AC-FT	32470	25890	28340	28610	10530	20450	25990	22950	20650	24290	29340	27320

CAL YR 1978 TOTAL 205601 MEAN 563 MAX 2850 MIN 173 AC-FT 407800
WTR YR 1979 TOTAL 149640 MEAN 410 MAX 2560 MIN 130 AC-FT 296800

09429600 COLORADO RIVER BELOW LAGUNA DAM, AZ-CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1972 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1976 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO
OCT												
02...	0120	233	1440	7.9	28.5	385	234	98	34	160	47	3.6
09...	0155	207	1450	7.9	25.5	375	221	98	32	165	48	3.7
16...	0040	212	1440	7.8	23.5	375	222	98	32	165	48	3.7
23...	0205	1440	1360	7.9	23.0	365	218	91	34	145	46	3.3
30...	0235	466	1520	8.0	22.0	395	231	104	33	175	49	3.8
NOV												
06...	0100	589	1450	8.0	20.0	380	224	103	30	165	48	3.7
13...	0135	258	1520	7.9	18.5	390	226	98	35	180	50	4.0
20...	0135	258	1480	7.8	16.0	385	226	98	34	170	49	3.8
27...	1440	556	1490	7.8	15.5	390	226	99	35	170	48	3.7
DEC												
04...	0230	322	1690	7.9	15.0	425	246	111	36	205	51	4.3
11...	0135	126	1530	7.8	12.0	390	228	101	34	180	50	4.0
18...	0345	281	1370	7.8	13.5	370	219	94	33	150	46	3.4
25...	0150	248	1510	7.8	20.0	395	226	99	36	175	49	3.8
JAN												
01...	0140	168	1690	7.7	18.5	415	236	110	34	205	51	4.4
08...	0130	108	1620	7.8	12.0	405	236	106	34	195	51	4.2
15...	0145	92	1770	7.9	15.5	430	248	114	35	220	52	4.6
22...	0210	1510	1500	7.9	13.5	390	221	102	33	175	49	3.9
29...	0020	807	1600	7.9	12.0	415	241	106	37	185	49	3.9
FEB												
05...	0135	139	1650	8.0	13.5	420	243	104	39	195	50	4.1
12...	0150	137	1690	7.8	14.5	430	248	114	35	200	50	4.2
19...	0115	363	1430	7.8	15.0	370	210	98	31	165	49	3.7
26...	0140	430	1370	7.9	15.5	370	212	92	34	150	46	3.4
MAR												
05...	0130	510	1360	7.9	16.0	365	208	92	33	150	47	3.4
12...	0100	404	1490	7.8	18.5	385	222	98	34	170	49	3.8
19...	0115	287	1390	7.8	16.5	365	209	94	32	160	48	3.6
26...	0130	415	1300	7.9	18.0	355	204	90	32	140	46	3.2
APR												
02...	0105	371	1300	7.9	18.0	355	204	91	31	140	46	3.2
09...	0140	775	1400	7.9	21.0	365	208	94	32	160	48	3.6
16...	0135	452	1300	8.0	21.0	360	208	90	33	140	45	3.2
23...	0105	616	1400	8.0	20.0	365	208	98	29	160	48	3.6
30...	0135	533	1360	8.0	24.0	375	221	110	24	145	45	3.3
MAY												
07...	0105	550	1320	8.0	22.0	360	208	95	30	145	46	3.3
14...	0100	290	1350	8.0	22.0	370	216	97	31	145	46	3.3

09429600 COLORADO RIVER BELOW LAGUNA DAM, AZ-CA--Continued

COOPERATION.--Daily specific conductance record furnished by, and water samples collected by, U. S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum observed, 1,870 micromhos Nov. 19, 1976; minimum observed, 1,090 Sept. 13, 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum observed, 1,800 micromhos Jan. 16; minimum observed, 1,260 micromhos Aug. 15, Sept. 14.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)
OCT												
02...	5.5	0	151	3.7	360	152	.5	10	916	911	.09	.40
09...	5.7	0	154	3.8	360	152	.5	12	926	918	.05	.20
16...	5.6	0	153	4.7	360	150	.5	10	912	913	.09	.40
23...	5.5	0	148	3.6	340	130	.4	8.8	846	844	.14	.60
30...	5.7	0	164	3.2	370	162	.5	12	964	962	.11	.50
NOV												
06...	5.6	0	156	3.0	360	150	.5	11	930	919	.16	.70
13...	5.6	0	164	4.0	360	172	.5	11	962	962	.11	.50
20...	5.6	0	159	4.9	360	162	.5	12	938	939	.14	.60
27...	5.8	0	164	5.1	360	160	.5	12	954	942	.18	.80
DEC												
04...	5.7	0	179	4.4	395	200	.5	11	1080	1070	.16	.70
11...	5.6	0	162	5.0	360	175	.5	11	970	966	.11	.50
18...	5.5	0	151	4.7	340	142	.6	9.8	868	866	.11	.50
25...	5.7	0	169	5.2	360	165	.6	13	958	956	.07	.30
JAN												
01...	5.9	0	179	7.0	385	205	.5	13	1090	1070	.11	.50
08...	5.5	0	169	5.2	365	200	.7	11	1040	1020	.16	.70
15...	5.9	0	182	4.5	395	225	.7	13	1140	1120	.11	.50
22...	5.9	0	169	4.1	360	162	.4	9.5	964	950	.16	.70
29...	5.8	0	174	4.3	380	180	.6	12	1040	1010	.16	.70
FEB												
05...	6.1	0	177	3.5	385	195	.5	12	1060	1040	.05	.20
12...	6.0	0	182	5.6	390	198	.6	13	1090	1070	.07	.30
19...	5.7	0	161	5.0	340	155	.7	11	900	904	.07	.30
26...	5.6	0	157	3.9	330	142	.6	13	868	862	.05	.20
MAR												
05...	5.5	0	157	3.9	335	135	.5	11	856	857	.07	.30
12...	5.7	0	162	5.0	355	165	.6	13	936	940	.11	.50
19...	5.6	0	156	4.8	335	150	.6	11	880	883	.18	.80
26...	5.6	0	151	3.7	325	128	.3	12	820	824	.07	.30
APR												
02...	5.4	0	151	3.7	325	125	.6	12	818	821	.05	.20
09...	5.6	0	157	3.9	330	152	.6	14	882	883	.05	.20
16...	5.6	0	153	3.0	325	125	.5	11	820	822	.05	.20
23...	5.3	0	157	3.1	335	149	.5	12	886	884	.05	.20
30...	5.4	0	154	3.0	335	138	.6	12	860	863	.02	.10
MAY												
07...	5.8	0	153	3.0	330	130	.5	12	838	840	.05	.20
14...	5.6	0	154	3.0	335	132	.3	12	848	851	.02	.10

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
MAY									
21...	0130	658	1320	7.9	24.0	360	206	94	31
28...	0100	329	1360	7.9	25.5	375	218	97	32
JUN									
04...	0110	379	1330	7.9	25.5	365	209	96	31
11...	0130	371	1330	8.0	26.0	365	209	95	31
18...	0130	542	1330	8.0	23.5	365	209	94	32
25...	0400	343	1300	8.0	25.5	360	211	91	32
JUL									
02...	0140	348	1320	7.9	29.0	360	204	93	31
09...	0100	400	1290	8.0	27.0	360	206	91	32
16...	0100	407	1300	8.2	29.0	360	209	90	33
23...	0110	343	1280	8.0	29.5	360	211	86	35
30...	1255	489	1330	8.0	28.0	365	214	90	34
AUG									
06...	0130	629	1290	8.1	27.0	360	212	94	31
13...	0155	553	1280	8.1	28.5	355	208	94	29
20...	0055	750	1300	8.2	26.5	360	212	94	31
27...	0145	600	1330	8.0	--	360	212	95	30
SEP									
03...	0120	446	1290	8.1	28.0	360	210	87	34
10...	0125	429	1300	8.2	25.5	330	190	82	31
17...	0040	488	1280	8.1	26.5	360	210	86	34
24...	0130	434	1280	8.1	29.0	330	180	82	30

09429600 COLORADO RIVER BELOW LAGUNA DAM, AZ-CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	SODIUM+POTASSIUM DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)
MAY									
21...	145	46	3.3	--	5.6	0	154	3.8	330
28...	145	45	3.3	--	5.6	0	157	3.9	340
JUN									
04...	145	46	3.3	--	5.6	0	156	3.8	330
11...	145	46	3.3	--	5.6	0	156	3.0	330
18...	145	46	3.3	--	5.7	0	156	3.0	330
25...	140	45	3.2	--	5.4	0	149	2.9	330
JUL									
02...	145	46	3.3	--	5.5	0	156	3.8	330
09...	135	45	3.1	--	5.7	0	154	3.0	325
16...	140	45	3.2	--	5.6	0	151	1.9	330
23...	135	45	3.1	--	5.8	0	149	2.9	325
30...	150	47	3.4	--	5.8	0	151	2.9	308
AUG									
06...	145	46	3.3	--	5.2	0	148	2.3	308
13...	135	45	3.1	--	5.0	0	148	2.3	312
20...	160	49	3.7	--	4.2	0	148	1.8	320
27...	145	46	3.3	--	6.4	0	148	2.9	335
SEP									
03...	140	46	3.2	--	4.0	0	148	2.3	300
10...	140	47	3.3	150	5.9	--	140	--	330
17...	140	46	3.2	--	4.0	0	148	2.3	330
24...	140	48	3.4	--	4.0	0	148	2.3	330

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
MAY								
21...	128	.6	12	838	839	.02	.10	--
28...	132	.6	11	862	858	.02	.10	--
JUN								
04...	130	.4	12	848	844	.02	.10	--
11...	130	.6	11	840	842	.05	.20	--
18...	130	.5	12	840	844	.11	.50	--
25...	124	.5	9.9	818	823	.07	.30	--
JUL								
02...	130	.5	11	834	840	.02	.10	--
09...	120	.5	13	818	815	.05	.20	--
16...	122	.3	12	840	824	.05	.20	--
23...	120	.5	11	804	808	--	--	--
30...	130	.6	13	820	824	.16	.70	--
AUG								
06...	108	.5	12	824	793	.02	.10	--
13...	125	.4	8.6	816	798	.02	.10	--
20...	125	.6	9.0	812	833	.05	.20	--
27...	135	.4	12	752	849	.05	.20	--
SEP								
03...	140	.6	11	836	799	.07	.30	--
10...	130	.6	11	868	815	--	--	.07
17...	130	.4	12	838	810	.09	.40	--
24...	120	.4	12	832	803	.09	.40	--

09429600 COLORADO RIVER BELOW LAGUNA DAM, AZ-CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1400	1630	1600	1690	1660	1390	1310	1310	1330	1330	1320	1270
2	1440	1640	1600	1700	1660	1370	1310	1320	1370	1330	1340	1270
3	1440	1600	1700	1700	1660	1370	1310	1350	1330	1310	1300	1290
4	1420	1510	1700	1760	1660	1370	1310	1350	1370	1310	1290	1280
5	1400	1480	1690	1600	1660	1360	1300	1330	1370	1310	1300	1270
6	1360	1460	1660	1650	1710	1370	1310	1340	1320	1370	1300	1280
7	1400	1430	1630	1640	1680	1310	1360	1330	1320	1340	1300	1330
8	1460	1360	1580	1640	1660	1380	1360	1330	1310	1370	1300	1310
9	1480	1370	1560	1660	1640	1530	1400	1330	1330	1300	1300	1300
10	1460	1440	1540	1700	1710	1450	1360	1320	1320	1380	1310	1310
11	1430	1440	1560	1720	1700	1480	1300	1330	1340	1300	1310	1300
12	1410	1500	1540	1740	1700	1500	1300	1360	1350	1300	1300	1280
13	1380	1530	1520	1740	1690	1470	1320	1360	1330	1290	1290	1280
14	1400	1540	1490	1740	1670	1410	1320	1360	1300	1300	1270	1260
15	1430	1520	1460	1790	1650	1410	1320	1340	1380	1310	1260	1330
16	1450	1510	1420	1800	1610	1380	1320	1330	1350	1310	1310	1350
17	1450	1500	1390	1730	1550	1380	1320	1320	1350	1290	1350	1290
18	1420	1410	1410	1560	1440	1390	1310	1330	1340	1280	1350	1290
19	1400	1430	1320	1410	1430	1400	1310	1340	1320	1310	1290	1290
20	1430	1460	1290	1400	1410	1410	1330	1330	1310	1280	1300	1320
21	1440	1510	1310	1430	1410	1360	1350	1320	1320	1290	1350	1280
22	1320	1540	1350	1510	1400	1330	1300	1460	1310	1280	1330	1310
23	1340	1540	1420	1580	1380	1340	1410	1320	1300	1280	1340	1290
24	1270	1520	1430	1570	1370	1340	1330	1300	1300	1300	1310	1300
25	1320	1540	1520	1560	1370	1330	1340	1330	1300	1320	1330	1310
26	1380	1560	1550	1570	1370	1310	1350	1360	1290	1310	1300	1320
27	1420	1500	1530	1570	1380	1320	1420	1380	1290	1310	1340	1290
28	1450	1520	1560	1590	1390	1320	1310	1360	1290	1320	1290	1290
29	1450	1530	1690	1600	---	1320	1370	1380	1300	1330	1310	1310
30	1520	1560	1570	1610	---	1320	1370	1380	1300	1340	1270	1300
31	1580	---	1690	1670	---	1330	---	1370	---	1310	1280	---
MONTH	1420	1500	1530	1630	1560	1380	1330	1340	1320	1310	1310	1300
YEAR	MAX	1800	MIN	1260	MEAN	1410						

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY
ABOVE MORELOS DAM, NEAR ANDRADE, CA

(National stream-quality accounting network and pesticide station)

LOCATION.--Lat 32°43'07", long 114°43'05", in NE¼SE¼ sec.21, T.8 S., R.24 W., Gila and Salt River meridian, in Arizona, Yuma County, Hydrologic Unit 15030108, on left bank at northerly international boundary, 0.5 mi (0.8 km) east of Andrade, 1.1 mi (1.8 km) upstream from Morelos Dam, 1.1 mi (1.8 km) downstream from Rockwood Gate, and 6.4 mi (10.3 km) downstream from gaging station on Colorado River below Yuma Main Canal wasteway.

DRAINAGE AREA.--246,700 mi^2 (639,000 km^2), approximately, including all closed basins entirely within the drainage boundary, also 3,959 mi^2 (10,254 km^2) in Great Divide basin in southern Wyoming.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1950 to current year. Prior to October 1958 published as "at international boundary."

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Supplementary water-stage recorder 1,680 ft (510 m) upstream at same datum.

REMARKS.--This record shows water passing northerly international boundary. Minor diversions to the United States below this station by pumping from ground water for irrigation in the floodway between river and Yuma levee.

COOPERATION.--Records furnished by International Boundary and Water Commission, U.S. Section (discharge figures rounded in accordance with Geological Survey standard practice).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,390 ft^3/s (719 m^3/s) Jan. 1, 1953; maximum elevation, 114.34 ft (34.851 m) Aug. 18, 1977; minimum discharge, 495 ft^3/s (14.0 m^3/s) Sept. 28, 1970; minimum elevation, 101.82 ft (31.035 m) Sept. 18, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,680 ft^3/s (274 m^3/s) Aug. 15, elevation, 111.12 ft (33.869 m); minimum discharge, 645 ft^3/s (18.3 m^3/s) Oct. 1; elevation, 102.22 ft (31.157 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	873	830	1230	1790	1200	2030	3540	2460	5000	5790	5660	5480
2	803	796	1450	1450	1210	2080	3730	3420	4950	5950	5800	5650
3	781	807	1500	1340	1250	2210	3760	3480	4970	5990	5780	5680
4	768	772	1490	1340	1320	2280	3850	3500	5000	5990	6030	5630
5	803	706	1470	1310	1330	2340	3860	3880	4920	6070	6010	5750
6	803	772	1490	1290	1390	2370	3840	3940	4900	5960	6150	5760
7	741	821	1660	1300	1370	2420	3900	3960	4950	5980	6190	5550
8	784	844	1670	1310	1450	2450	3920	3990	4920	6030	6150	5280
9	784	798	1730	1180	1660	2490	3920	4450	4930	6280	6000	5080
10	784	786	1830	1160	1620	2430	3940	4600	4960	6140	5330	4920
11	772	786	1860	1130	1590	2390	3890	4630	4930	6070	6060	4840
12	807	786	1840	1130	1620	2310	3920	4660	4890	6060	7260	4990
13	807	786	1940	1130	1650	2250	3990	5100	4900	6380	8960	5090
14	796	810	1900	1140	1680	2310	3990	5110	4450	6290	9480	4830
15	807	798	1880	1140	1680	2360	3980	5110	4050	6340	8750	4320
16	807	810	2000	1170	1700	2360	3980	5220	4380	6040	6590	4370
17	818	798	1990	1120	1790	2380	3970	5180	5130	5890	7580	4820
18	807	810	2000	1190	1950	2360	4000	5050	5490	5970	8780	4820
19	807	798	2920	1670	1990	2620	3980	4940	5440	6180	8360	5120
20	818	798	3570	1450	1950	4220	3980	4930	5380	6850	6840	5310
21	796	913	2200	1780	1920	5730	3970	5360	5520	8780	6140	5110
22	1250	890	2150	1920	1940	4530	3980	5510	5480	9020	5960	5040
23	1340	902	2260	1460	1960	4950	3700	5230	5530	7560	5690	5240
24	1700	902	2260	1340	2010	5390	3380	5290	5660	6190	5170	5300
25	1860	867	2260	1380	2070	5280	3350	5690	5760	6470	5060	5310
26	1890	902	2280	1610	2040	4400	3140	5810	5560	6360	5450	5260
27	1100	1080	2210	1510	2010	3760	3320	5690	5420	6340	5380	5170
28	784	1090	2190	1630	2020	3620	3070	5540	5480	5920	5550	5080
29	784	867	2200	1670	---	3610	2630	5310	5480	5750	5650	5230
30	772	878	2190	1260	---	3610	2500	5280	5480	5740	5660	5210
31	807	---	2010	1180	---	3500	---	5120	---	5800	5460	---
TOTAL	29053	25203	61630	42480	47370	97040	110980	147440	153910	196180	198930	155240
MEAN	937	840	1988	1370	1692	3130	3699	4756	5130	6328	6417	5175
MAX	1890	1090	3570	1920	2070	5730	4000	5810	5760	9020	9480	5760
MIN	741	706	1230	1120	1200	2030	2500	2460	4050	5740	5060	4320
AC-FT	57630	49990	122200	84260	93960	192500	220100	292400	305300	389100	394600	307900

CAL YR 1978 TOTAL 734828 MEAN 2013 MAX 4810 MIN 706 AC-FT 1458000
WTR YR 1979 TOTAL 1265456 MEAN 3467 MAX 9480 MIN 706 AC-FT 2510000

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1968 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1969 to current year.

REMARKS.--Unpublished chemical analyses (continuing record) for water years 1961-68 available from district office in Tucson, Ariz.

COOPERATION.--Quarterly pesticide analysis performed by Environmental Protection Agency. Water samples collected by International Boundary and Water Commission (U. S. section).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,230 micromhos Dec. 9, 1969; minimum, 1,020 micromhos Sept. 27, 1976.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,820 micromhos Jan. 3; minimum, 1,060 micromhos Feb. 28, Mar. 1, 2.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT											
02...	0830	792	1660	8.0	--	1.0	--	--	--	--	430
04...	0800	770	--	--	--	--	--	--	320	--	--
10...	0830	784	1650	7.9	26.5	1.0	--	--	--	--	425
12...	0830	807	--	--	--	--	--	--	770	--	--
16...	0830	807	1670	7.9	26.0	1.0	--	--	--	--	420
17...	0845	818	1690	7.6	23.0	--	7.8	120	6000	310	--
23...	0830	1160	1450	8.0	--	6.0	--	--	--	--	385
25...	0830	1820	--	--	--	--	--	--	900	--	--
30...	0830	761	1760	7.9	21.0	6.0	--	20	--	--	445
31...	0830	818	--	--	--	--	--	--	330	--	--
NOV											
06...	0840	772	1700	7.9	--	1.0	--	--	--	--	425
13...	0845	764	1720	8.2	--	1.0	--	--	--	--	430
14...	0900	810	1800	8.0	17.0	--	9.5	40	280	170	--
20...	0830	775	1680	7.9	--	1.0	--	--	190	--	425
27...	0850	950	1650	7.9	15.0	3.0	--	--	--	--	425
28...	0845	1260	--	--	13.0	--	--	7	700	--	--
DEC											
04...	0830	1500	1740	7.9	--	2.0	--	--	--	--	440
05...	0845	1470	1820	7.6	13.0	--	9.0	9	140	200	--
11...	0830	1840	1610	7.8	--	1.0	--	--	39	--	415
18...	0830	1930	1580	7.8	--	1.0	--	--	--	--	410
19...	0830	2700	--	--	--	--	--	18	380	--	--
26...	0905	2300	1710	7.9	13.0	1.0	--	--	--	--	435
28...	0900	2180	--	--	--	--	--	--	20	--	--
JAN											
02...	0900	1380	1680	8.0	--	3.0	--	--	--	--	430
03...	0900	1370	--	--	--	--	--	--	48	--	--
08...	0800	1300	1600	7.9	11.0	3.0	--	--	--	--	420
09...	0850	1190	1810	8.1	--	--	10.0	27	67	71	--
15...	0840	1140	1790	8.0	13.5	1.0	--	--	--	--	450
17...	0900	1130	--	--	--	--	--	--	150	--	--
22...	0830	2000	1430	7.8	--	8.0	--	--	--	--	375
23...	0830	1490	--	--	--	--	--	22	93	--	--
29...	0830	1720	1410	7.8	--	36	--	--	--	--	350
31...	0830	1170	--	--	--	--	--	--	150	--	--
FEB											
05...	0830	1320	1250	7.8	--	94	--	--	--	--	290
07...	0845	1380	--	--	11.0	--	--	--	90	--	--
12...	0830	1600	1170	7.6	--	64	--	--	--	--	265

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)
OCT											
02...	253	109	38	195	49	4.1	5.6	0	177	3.5	380
04...	--	--	--	--	--	--	--	--	--	--	--
10...	250	106	39	190	49	4.0	5.8	0	176	4.3	380
12...	--	--	--	--	--	--	--	--	--	--	--
16...	241	109	36	200	50	4.2	5.8	0	179	4.4	380
17...	--	--	--	--	--	--	--	--	--	--	--
23...	229	99	34	165	48	3.6	5.5	0	156	3.0	360
25...	--	--	--	--	--	--	--	--	--	--	--
30...	256	117	37	210	50	4.3	5.7	0	189	4.6	400
31...	--	--	--	--	--	--	--	--	--	--	--
NOV											
06...	246	109	37	205	51	4.3	5.8	0	179	4.4	390
13...	250	112	37	210	51	4.4	5.8	0	185	2.3	390
14...	--	--	--	--	--	--	5.4	--	--	--	--
20...	244	110	37	200	50	4.2	5.8	0	180	4.4	380
27...	248	109	37	190	49	4.0	5.8	0	177	4.4	385
28...	--	--	--	--	--	--	--	--	--	--	--
DEC											
04...	254	115	37	210	51	4.4	5.8	0	185	4.6	400
05...	--	--	--	--	--	--	--	--	--	--	--
11...	248	106	37	190	49	4.0	5.7	0	167	5.2	365
18...	242	106	35	185	49	4.0	5.6	0	167	5.2	360
19...	--	--	--	--	--	--	--	--	--	--	--
26...	250	110	39	205	50	4.3	5.8	0	185	4.6	390
28...	--	--	--	--	--	--	--	--	--	--	--
JAN											
02...	250	108	39	200	50	4.2	5.6	0	180	3.5	375
03...	--	--	--	--	--	--	--	--	--	--	--
08...	246	106	38	185	48	3.9	5.4	0	174	4.3	365
09...	--	--	--	--	--	--	--	--	--	--	--
15...	258	114	40	215	51	4.4	5.9	0	192	3.7	405
17...	--	--	--	--	--	--	--	--	--	--	--
22...	212	96	33	160	48	3.6	5.8	0	162	5.0	320
23...	--	--	--	--	--	--	--	--	--	--	--
29...	184	90	31	165	50	3.8	5.8	0	166	5.1	295
31...	--	--	--	--	--	--	--	--	--	--	--
FEB											
05...	130	78	23	150	52	3.8	6.2	0	161	5.0	200
07...	--	--	--	--	--	--	--	--	--	--	--
12...	111	72	21	140	53	3.7	6.4	0	154	7.6	170

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)
OCT											
02...	200	.5	11	1060	1050	--	--	.25	1.1	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
10...	195	.5	13	1050	1040	--	--	.27	1.2	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
16...	200	.5	13	1050	1050	--	--	.29	1.3	--	--
17...	--	--	--	--	--	9	.28	.30	1.3	.02	.02
23...	152	.5	9.5	922	920	--	--	.20	.90	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
30...	218	.6	14	1130	1120	20	.38	.32	1.4	.02	.02
31...	--	--	--	--	--	--	--	--	--	--	--
NOV											
06...	205	.6	15	1090	1080	--	--	.32	1.4	--	--
13...	210	.6	14	1100	1090	--	--	.29	1.3	--	--
14...	--	--	--	--	--	29	.36	--	--	.01	.02
20...	202	.5	13	1080	1060	--	--	.29	1.3	--	--
27...	190	.6	13	1070	1040	--	--	.29	1.3	--	--
28...	--	--	--	--	--	19	.26	.28	1.2	.01	.02
DEC											
04...	210	.6	13	1110	1100	--	--	.29	1.3	--	--
05...	--	--	--	--	--	23	.21	--	--	.01	.02
11...	200	.6	11	1030	1020	--	--	.23	1.0	--	--
18...	192	.5	11	1010	996	--	--	.20	.90	--	--
19...	--	--	--	--	--	10	.21	--	--	.01	.01
26...	208	.7	13	1100	1080	--	--	.11	.50	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
JAN											
02...	208	.6	11	1080	1060	--	--	.27	1.2	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
08...	190	.6	11	1030	1010	--	--	.27	1.2	--	--
09...	--	--	--	--	--	14	.29	.24	1.1	.02	.01
15...	220	.6	13	1160	1130	--	--	.29	1.3	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
22...	162	.5	11	908	887	--	--	.20	.90	--	--
23...	--	--	--	--	--	26	.17	.18	.80	.04	.01
29...	170	.5	12	882	870	--	--	.20	.90	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
FEB											
05...	178	.5	10	740	744	--	--	.20	.90	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
12...	174	.5	8.5	674	686	--	--	.23	1.0	--	--

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS NO2)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)
OCT										
02...	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
17...	.07	.30	.32	.21	.76	.97	1.3	.12	--	.05
23...	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--
30...	.07	.40	.40	.08	.51	.59	.99	.09	--	.03
31...	--	--	--	--	--	--	--	--	--	--
NOV										
06...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
14...	.07	.37	.39	.18	.36	.54	.91	.10	.08	.05
20...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
28...	.07	.27	.30	.17	.51	.68	.95	.11	--	.04
DEC										
04...	--	--	--	--	--	--	--	--	--	--
05...	.07	.22	.28	.10	.51	.61	.83	.07	--	.02
11...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
19...	.03	.22	.27	.07	.27	.34	.56	.06	--	.01
26...	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--
JAN										
02...	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
09...	.03	.31	.25	.12	.30	.42	.73	.10	--	.04
15...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
23...	.03	.21	.19	.09	.31	.40	.61	.13	--	.04
29...	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--
FEB										
05...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
FEB											
13...	0830	1660	1300	7.7	13.5	--	8.5	47	120	500	--
20...	0830	1960	1110	7.6	--	78	--	--	--	--	255
22...	0845	1950	--	--	--	--	--	--	110	--	--
26...	0830	2060	1070	7.8	--	63	--	--	--	--	245
27...	0830	2020	--	--	13.0	--	--	30	90	--	--
MAR											
05...	0855	2330	1090	7.6	15.5	43	--	--	--	--	255
07...	0830	2430	--	--	--	--	--	--	70	--	--
12...	0830	2330	112	--	--	39	--	--	--	--	265
13...	0815	2250	1200	7.9	18.5	--	6.9	32	73	230	--
19...	0850	2660	1150	7.6	18.5	44	--	--	--	--	260
26...	0830	4650	1180	7.8	--	32	--	--	--	--	300
27...	0830	3830	--	--	19.0	--	--	27	90	--	--
APR											
02...	0900	3730	1160	7.7	--	33	--	--	--	--	280
04...	0830	3820	--	--	--	--	--	--	70	--	--
09...	0830	3930	1160	7.7	19.0	36	--	--	--	--	280
10...	0900	3970	1200	7.9	19.0	--	7.0	24	26	180	--
16...	0830	3970	1190	7.8	--	29	--	--	--	--	300
18...	0910	--	--	--	--	--	--	--	38	--	--
23...	0830	3710	1220	7.9	23.0	26	--	--	--	--	300
24...	0830	3360	--	--	--	--	--	24	46	--	--
30...	0830	2490	1200	7.8	--	44	--	--	--	--	270
MAY											
02...	0945	--	--	--	--	--	--	--	56	--	--
07...	0840	3950	1210	7.8	21.5	37	--	--	--	--	305
08...	0845	3950	1220	7.7	21.0	--	7.2	24	130	600	--
16...	0830	--	--	--	--	--	--	--	73	--	--
21...	0830	5170	1190	7.9	--	25	--	--	--	--	300
22...	0815	4560	--	--	25.5	--	--	20	77	--	--
29...	0830	5220	1210	7.9	--	39	--	--	--	--	305
31...	0830	5080	--	--	--	--	--	--	65	--	--
JUN											
04...	0830	5040	1190	7.8	--	27	--	--	--	--	305
06...	0830	4960	--	--	--	--	--	--	K60	--	--
11...	0830	4900	1200	7.9	26.0	42	--	--	--	--	305
12...	0830	4940	1200	8.0	29.0	--	5.2	38	67	130	--
18...	0830	5510	1210	7.9	--	24	--	--	--	--	310
20...	0830	5350	--	--	--	--	--	--	110	--	--
25...	0840	5880	1180	7.9	--	17	--	--	--	--	305

K Results based on colony count outside the acceptable range (non-ideal colony count).

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)
FEB											
13...	--	--	--	--	--	--	--	--	--	--	--
20...	104	70	20	130	52	3.5	6.3	0	151	7.4	160
22...	--	--	--	--	--	--	--	--	--	--	--
26...	96	66	20	125	52	3.5	6.0	0	149	4.6	155
27...	--	--	--	--	--	--	--	--	--	--	--
MAR											
05...	108	66	22	125	51	3.4	5.5	0	148	7.2	170
07...	--	--	--	--	--	--	--	--	--	--	--
12...	112	70	22	135	52	3.6	6.3	0	153	--	170
13...	--	--	--	--	--	--	--	--	--	--	--
19...	109	72	20	135	52	3.6	5.4	0	151	7.4	180
26...	151	78	26	130	48	3.3	5.5	0	149	4.6	225
27...	--	--	--	--	--	--	--	--	--	--	--
APR											
02...	128	76	22	135	51	3.5	5.4	0	153	5.9	210
04...	--	--	--	--	--	--	--	--	--	--	--
09...	126	78	21	135	50	3.5	5.4	0	154	6.0	210
10...	--	--	--	--	--	--	--	--	--	--	--
16...	148	78	26	135	49	3.4	5.2	0	153	4.7	230
18...	--	--	--	--	--	--	--	--	--	--	--
23...	146	79	25	140	50	3.5	5.2	0	154	3.8	230
24...	--	--	--	--	--	--	--	--	--	--	--
30...	108	76	20	145	53	3.8	5.6	0	162	5.0	175
MAY											
02...	--	--	--	--	--	--	--	--	--	--	--
07...	149	83	24	135	48	3.4	5.6	0	156	4.8	230
08...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
21...	149	80	24	135	49	3.4	5.4	0	151	3.7	245
22...	--	--	--	--	--	--	--	--	--	--	--
29...	146	83	24	135	48	3.4	5.7	0	159	3.9	235
31...	--	--	--	--	--	--	--	--	--	--	--
JUN											
04...	148	80	26	130	47	3.2	5.6	0	157	4.9	230
06...	--	--	--	--	--	--	--	--	--	--	--
11...	149	82	24	135	49	3.4	5.5	0	156	3.8	245
12...	--	--	--	--	--	--	--	--	--	--	--
18...	154	82	26	135	48	3.3	5.6	0	156	3.8	245
20...	--	--	--	--	--	--	--	--	--	--	--
25...	158	82	24	130	48	3.2	5.4	0	148	3.6	250

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)
FEB											
13...	--	--	--	--	--	131	.04	.11	.49	.08	.03
20...	160	.6	8.8	648	648	--	--	.23	1.0	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
26...	150	.5	10	632	623	--	--	.14	.60	--	--
27...	--	--	--	--	--	68	.08	.06	.27	.04	.03
MAR											
05...	145	.5	10	634	635	--	--	.41	1.8	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
12...	168	.5	12	674	677	--	--	.23	1.0	--	--
13...	--	--	--	--	--	54	.12	.17	.75	.08	.04
19...	155	.5	11	672	671	--	--	.23	1.0	--	--
26...	145	.5	12	720	713	--	--	.20	.90	--	--
27...	--	--	--	--	--	50	.07	.14	.62	.08	.02
APR											
02...	145	.4	12	696	698	--	--	.11	.50	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
09...	144	.5	13	694	700	--	--	.11	.50	--	--
10...	--	--	--	--	--	40	.06	.11	.49	.02	.02
16...	145	.4	13	724	725	--	--	.14	.60	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
23...	152	.5	12	734	737	--	--	.11	.50	--	--
24...	--	--	--	--	--	39	.13	.11	.49	.01	.00
30...	172	.5	14	700	707	--	--	.18	.80	--	--
MAY											
02...	--	--	--	--	--	--	--	--	--	--	--
07...	148	.4	13	726	733	--	--	.09	.40	--	--
08...	--	--	--	--	--	52	.06	.06	.27	.02	.01
16...	--	--	--	--	--	--	--	--	--	--	--
21...	135	.4	12	724	728	--	--	.09	.40	--	--
22...	--	--	--	--	--	30	.05	.06	.27	.02	.01
29...	142	.6	12	730	734	--	--	.11	.50	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
JUN											
04...	139	.5	12	714	719	--	--	.11	.50	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
11...	135	.5	11	726	733	--	--	.14	.60	--	--
12...	--	--	--	--	--	59	.04	.10	.44	.04	.01
18...	138	.5	11	730	738	--	--	.14	.60	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
25...	130	.4	9.5	716	721	--	--	.11	.50	--	--

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
FEB										
13...	.10	.12	.14	.13	.63	.76	.88	.24	.09	.06
20...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--
27...	.10	.12	.09	.10	.66	.76	.88	.12	--	.01
MAR										
05...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
13...	.13	.20	.21	.11	.41	.52	.72	.14	--	.06
19...	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--
27...	.07	.15	.16	.09	.40	.49	.64	.09	--	.05
APR										
02...	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
10...	.07	.08	.13	.04	.63	.67	.75	.12	--	.02
16...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
24...	.03	.14	.12	.06	.60	.66	.80	.13	--	.07
30...	--	--	--	--	--	--	--	--	--	--
MAY										
02...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
08...	.03	.08	.07	.04	.68	.72	.80	.16	.07	.04
16...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
22...	.03	.07	.07	.04	.42	.46	.53	.10	--	.03
29...	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--
JUN										
04...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--
12...	.03	.08	.11	.04	1.6	1.6	1.7	.10	--	.08
18...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
JUN											
26...	0830	5600	--	--	28.0	--	--	32	67	--	--
JUL											
02...	0830	5970	1200	7.9	--	18	--	--	--	--	310
09...	0830	6340	1190	8.0	--	17	--	--	--	--	310
10...	0830	6190	1180	7.7	28.0	--	5.8	18	130	65	--
16...	0830	5480	1190	8.2	--	78	--	--	--	--	310
23...	0830	7760	1200	8.0	--	34	--	--	--	--	310
24...	0830	5940	--	--	29.5	--	--	17	--	--	--
31...	1210	5760	1180	8.0	--	35	--	--	--	--	305
AUG											
06...	0830	6220	1200	7.9	--	45	--	--	--	--	325
07...	0830	5920	1210	7.9	29.0	--	5.2	13	120	148	--
13...	--	9000	1160	8.0	27.1	43	--	--	--	--	300
20...	0930	7200	1220	8.1	28.0	42	--	17	--	--	350
27...	0830	5480	1180	7.9	--	32	--	--	--	--	310
SEP											
04...	0830	5480	1180	8.1	--	15	--	--	--	--	310
10...	0830	5020	1200	--	--	--	--	--	--	--	290
11...	0925	4770	1200	7.5	29.0	--	5.8	12	190	148	--
17...	0830	4810	1200	8.0	--	57	--	--	--	--	310
24...	0830	5280	1210	8.1	--	36	--	--	--	--	320
25...	0845	5310	--	--	28.0	--	--	21	--	--	--

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY,
ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	SODIUM+POTASSIUM DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
JUN											
26...	--	--	--	--	--	--	--	--	--	--	--
JUL											
02...	162	82	26	135	48	3.3	--	5.5	0	148	3.6
09...	159	81	26	130	47	3.2	--	5.2	0	151	2.9
10...	--	--	--	--	--	--	--	--	--	--	--
16...	159	84	24	130	47	3.2	--	5.6	0	151	1.9
23...	164	82	26	130	47	3.2	--	5.8	0	146	2.8
24...	--	--	--	--	--	--	--	--	--	--	--
31...	154	74	29	140	50	3.5	--	5.0	0	151	2.9
AUG											
06...	176	90	24	145	49	3.5	--	5.0	0	149	3.7
07...	--	--	--	--	--	--	--	--	--	--	--
13...	160	84	22	130	48	3.3	--	5.2	0	139	2.7
20...	196	87	32	150	48	3.5	--	5.0	0	184	2.4
27...	160	78	28	140	49	3.5	--	6.0	0	151	3.7
SEP											
04...	160	82	25	130	47	3.2	--	4.0	0	148	2.3
10...	150	77	24	150	52	3.8	160	5.7	--	140	--
11...	--	--	--	--	--	--	--	--	--	--	--
17...	160	70	33	140	49	3.5	--	4.0	0	148	2.9
24...	170	85	25	140	49	3.4	--	4.0	0	148	2.3
25...	--	--	--	--	--	--	--	--	--	--	--

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)	NITROGEN, NITRITE TOTAL (MG/L AS N)
JUN											
26...	--	--	--	--	--	--	49	.08	.08	.35	.02
JUL											
02...	265	130	.5	12	730	745	--	--	.05	.20	--
09...	255	130	.4	13	726	732	--	--	.14	.60	--
10...	--	--	--	--	--	--	55	.07	.05	.22	.02
16...	250	130	.6	12	704	728	--	--	.14	.60	--
23...	255	130	.5	12	724	729	--	--	--	--	--
24...	--	--	--	--	--	--	52	.06	.10	.44	.02
31...	248	132	.5	11	732	732	--	--	.23	1.0	--
AUG											
06...	250	145	.5	13	738	763	--	--	.11	.50	--
07...	--	--	--	--	--	--	55	.09	.10	.44	.02
13...	240	122	.4	11	736	708	--	--	.14	.60	--
20...	245	140	.5	9.5	740	763	51	.07	.18	.80	.06
27...	242	140	.3	11	748	736	--	--	.07	.30	--
SEP											
04...	240	140	.6	11	726	724	--	--	--	--	--
10...	270	150	.5	9.5	767	771	--	--	--	--	--
11...	--	--	--	--	--	--	41	.09	.11	.49	.02
17...	240	140	.4	11	768	720	--	--	.18	.80	--
24...	250	140	.4	10	744	746	--	--	.14	.60	--
25...	--	--	--	--	--	--	37	.11	.11	.49	.06

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
JUN											
26...	.00	.00	.10	.08	.05	.45	.50	.60	.020	--	.00
JUL											
02...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
10...	.01	.03	.09	.06	.07	.16	.23	.32	.090	--	.03
16...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
24...	.01	.03	.08	.11	.05	.80	.85	.93	.150	--	.04
31...	--	--	--	--	--	--	--	--	--	--	--
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
07...	.01	.03	.11	.11	.03	.47	.50	.61	.120	.030	.04
13...	--	--	--	--	--	--	--	--	--	--	--
20...	.01	.03	.13	.14	.05	.75	.80	.93	.140	--	.08
27...	--	--	--	--	--	--	--	--	--	--	--
SEP											
04...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	.11	--	--	--	--	--	--	--
11...	.01	.03	.11	.12	.07	.64	.71	.82	.070	--	.08
17...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
25...	.01	.03	.15	.12	.07	.44	.51	.66	.090	--	.12

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
OCT												
17...	0845	--	--	--	420	--	--	--	--	--	--	--
30...	0830	--	--	--	290	--	--	--	--	--	--	--
NOV												
14...	0900	3	--	3	290	1	1	0	0	0	0	0
28...	0845	--	--	--	240	--	--	--	--	--	--	--
DEC												
05...	0845	--	--	--	280	--	--	--	--	--	--	--
19...	0830	--	--	--	210	--	--	--	--	--	--	--
JAN												
09...	0850	--	--	--	280	--	--	--	--	--	--	--
23...	0830	--	--	--	240	--	--	--	--	--	--	--
FEB												
13...	0830	6	1	5	270	1	0	1	0	0	0	3
27...	0830	--	--	--	220	--	--	--	--	--	--	--
MAR												
13...	0815	--	--	--	240	--	--	--	--	--	--	--
27...	0830	--	--	--	230	--	--	--	--	--	--	--
APR												
10...	0900	--	--	--	220	--	--	--	--	--	--	--
24...	0830	--	--	--	250	--	--	--	--	--	--	--
MAY												
08...	0845	3	0	5	220	0	0	<1	0	0	0	2
22...	0815	--	--	--	200	--	--	--	--	--	--	--
JUN												
12...	0830	--	--	--	190	--	--	--	--	--	--	--
26...	0830	--	--	--	200	--	--	--	--	--	--	--
JUL												
10...	0830	--	--	--	560	--	--	--	--	--	--	--
24...	0830	--	--	--	210	--	--	--	--	--	--	--
AUG												
07...	0830	5	1	4	250	0	0	<1	0	0	0	0
20...	0930	--	--	--	210	--	--	--	--	--	--	--
SEP												
11...	0925	--	--	--	210	--	--	--	--	--	--	--
25...	0845	--	--	--	210	--	--	--	--	--	--	--

< Actual value is known to be less than the value shown.

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT												
17...	--	--	--	--	--	400	--	--	--	--	--	--
30...	--	--	--	--	--	350	--	--	--	--	--	--
NOV												
14...	0	0	3	3	0	420	410	10	10	6	4	110
28...	--	--	--	--	--	570	--	--	--	--	--	--
DEC												
05...	--	--	--	--	--	4000	--	--	--	--	--	--
19...	--	--	--	--	--	210	--	--	--	--	--	--
JAN												
09...	--	--	--	--	--	330	--	--	--	--	--	--
23...	--	--	--	--	--	790	--	--	--	--	--	--
FEB												
13...	3	0	16	10	6	3800	3800	20	7	5	2	360
27...	--	--	--	--	--	2500	--	--	--	--	--	--
MAR												
13...	--	--	--	--	--	1700	--	--	--	--	--	--
27...	--	--	--	--	--	1200	--	--	--	--	--	--
APR												
10...	--	--	--	--	--	950	--	--	--	--	--	--
24...	--	--	--	--	--	900	--	--	--	--	--	--
MAY												
08...	0	<3	0	0	1	1600	1600	10	13	13	0	190
22...	--	--	--	--	--	770	--	--	--	--	--	--
JUN												
12...	--	--	--	--	--	1500	--	--	--	--	--	--
26...	--	--	--	--	--	970	--	--	--	--	--	--
JUL												
10...	--	--	--	--	--	1400	--	--	--	--	--	--
24...	--	--	--	--	--	970	--	--	--	--	--	--
AUG												
07...	0	<3	4	2	2	1400	1400	<0	2	2	0	120
20...	--	--	--	--	--	970	--	--	--	--	--	--
SEP												
11...	--	--	--	--	--	1700	--	--	--	--	--	--
25...	--	--	--	--	--	1000	--	--	--	--	--	--

DATE	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT											
17...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
NOV											
14...	80	30	.0	.0	.0	5	1	4	10	0	10
28...	--	--	--	--	--	--	--	--	--	--	--
DEC											
05...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
JAN											
09...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
FEB											
13...	350	10	.0	.0	.0	1	0	1	30	10	20
27...	--	--	--	--	--	--	--	--	--	--	--
MAR											
13...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
APR											
10...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
MAY											
08...	180	7	.3	.2	.1	2	0	2	20	20	<3
22...	--	--	--	--	--	--	--	--	--	--	--
JUN											
12...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
JUL											
10...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
AUG											
07...	120	3	.0	.0	.0	2	0	2	10	7	<3
20...	--	--	--	--	--	--	--	--	--	--	--
SEP											
11...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--

< Actual value is known to be less than the value shown.

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
NOV											
14...	0900	810	1800	8.0	17.0	<12	.8	5.9	1.1	5.4	1.1
MAY											
08...	0845	3950	1220	7.7	21.0	<11	2.0	9.6	2.3	9.0	2.3

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT							
17...	0845	3.3	--	--	.00	.0	--
30...	0830	3.6	--	--	--	--	--
NOV							
14...	0900	--	2.8	.8	.00	.0	--
28...	0845	3.7	--	--	--	--	--
DEC							
05...	0845	3.1	--	--	--	--	--
19...	0830	3.6	--	--	--	--	--
JAN							
09...	0850	10	--	--	--	.0	--
23...	0830	5.9	--	--	--	--	--
FEB							
13...	0830	--	9.6	.6	--	.0	--
27...	0830	8.9	--	--	--	--	--
MAR							
13...	0815	8.6	--	--	--	.0	--
27...	0830	7.5	--	--	--	--	--
APR							
10...	0900	5.6	--	--	--	.0	--
10...	0905	--	--	--	--	ND	ND
24...	0830	8.8	--	--	--	--	--
MAY							
08...	0830	--	--	--	--	--	ND
08...	0845	--	9.4	1.0	--	.0	--
22...	0815	7.2	--	--	--	--	--
JUN							
12...	0825	--	--	--	--	ND	ND
12...	0830	6.6	--	--	--	.0	--
26...	0830	5.0	--	--	--	--	--
JUL							
10...	0830	6.1	--	--	--	.0	--
24...	0830	8.4	--	--	--	--	--
AUG							
07...	0830	4.9	--	--	--	.0	--
20...	0930	7.8	--	--	--	--	--
SEP							
11...	0925	6.5	--	--	--	.0	--
14...	0925	--	--	--	--	ND	--
25...	0845	4.2	--	--	--	--	--

< Actual value is known to be less than the value shown.
ND Material specifically analyzed for but not detected.

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL (UG/L)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL (UG/L)
OCT												
17...	0845	.00	--	.0	--	.00	--	.00	--	.00	--	.01
NOV												
14...	0900	.00	--	.0	--	.00	--	.00	--	.00	--	.00
DEC												
19...	0830	--	--	--	--	--	--	--	--	--	--	--
JAN												
09...	0850	.00	--	.0	--	.00	--	.00	--	.00	--	.00
FEB												
13...	0830	.00	--	.0	--	.00	--	.00	--	.00	--	.01
MAR												
13...	0815	.00	--	.0	--	.00	--	.00	--	.00	--	.01
APR												
10...	0900	.00	--	.0	--	.00	--	.00	--	.00	--	.00
10...	0905	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY												
08...	0830	--	ND	--	ND	--	ND	--	ND	--	ND	--
08...	0845	.00	--	.0	--	.00	--	.00	--	.00	--	.00
JUN												
12...	0825	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12...	0830	.00	--	.0	--	.00	--	.00	--	.00	--	.00
JUL												
10...	0830	.00	--	.0	--	.00	--	.00	--	.00	--	.00
AUG												
07...	0830	.00	--	.0	--	.00	--	.00	--	.00	--	.00
SEP												
11...	0925	.00	--	.0	--	.00	--	.00	--	.00	--	.00
14...	0925	ND	--	ND	--	ND	--	ND	--	ND	--	ND

DATE	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN TOTAL (UG/L)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOTAL (UG/L)
OCT											
17...	--	.00	--	.00	.00	--	.00	--	.00	--	.00
NOV											
14...	--	.00	--	.00	.00	--	.00	--	.00	--	.00
DEC											
19...	--	--	--	--	--	--	--	--	--	--	--
JAN											
09...	--	.00	--	.00	.00	--	.00	--	.00	--	.00
FEB											
13...	--	.00	--	.00	.00	--	.00	--	.00	--	.00
MAR											
13...	--	.00	--	.00	.00	--	.00	--	.00	--	.00
APR											
10...	--	.00	--	.00	.00	--	.00	--	.00	--	.00
10...	ND	ND	ND	--	ND	ND	ND	ND	ND	ND	ND
MAY											
08...	ND	--	ND	--	--	ND	--	ND	--	ND	--
08...	--	.00	--	.00	.00	--	.00	--	.00	--	.00
JUN											
12...	ND	ND	ND	--	ND	ND	ND	ND	ND	ND	ND
12...	--	.00	--	.00	.00	--	.00	--	.00	--	.00
JUL											
10...	--	.00	--	.00	.00	--	.00	--	.00	--	.00
AUG											
07...	--	.00	--	.00	.00	--	.00	--	.00	--	.00
SEP											
11...	--	.00	--	.00	.00	--	.00	--	.00	--	.00
14...	--	ND	--	--	ND	--	ND	--	ND	--	ND

ND Material specifically analyzed for but not detected.

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL (UG/L)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOTAL (UG/L)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOTAL (UG/L)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOTAL (UG/L)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)
OCT											
17...	--	.00	--	.00	--	--	--	.00	--	.00	--
NOV											
14...	--	.00	--	.00	--	--	--	.00	--	.00	--
DEC											
19...	--	--	--	--	--	--	--	--	--	--	--
JAN											
09...	--	.00	--	.00	--	--	--	.00	--	.00	--
FEB											
13...	--	.00	--	.00	--	--	--	.00	--	.00	--
MAR											
13...	--	.00	--	.00	--	--	--	.00	--	.00	--
APR											
10...	--	.00	--	.00	--	--	--	.00	--	.00	--
10...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY											
08...	ND	--	ND	--	ND	--	ND	--	ND	--	ND
08...	--	.00	--	.00	--	--	--	.00	--	.00	--
JUN											
12...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12...	--	.00	--	.00	--	--	--	.00	--	.00	--
JUL											
10...	--	.00	--	.00	--	--	--	.00	--	.00	--
AUG											
07...	--	.00	--	.00	--	--	--	.00	--	.00	--
SEP											
11...	--	.00	--	.00	--	.00	--	.00	--	.00	--
14...	--	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	MIREX, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PER-THANE TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)
OCT											
17...	.00	.00	--	.00	.00	0	--	.00	--	.00	.00
NOV											
14...	.00	.00	--	.00	.00	0	--	.00	--	.56	.00
DEC											
19...	--	--	--	--	.00	--	--	--	--	.08	.00
JAN											
09...	.00	.00	--	.00	.00	0	--	.00	--	.00	.00
FEB											
13...	.00	.00	--	.00	.00	0	--	.00	--	.01	.00
MAR											
13...	.00	.00	--	.00	.00	0	--	.00	--	.03	.00
APR											
10...	.00	.00	--	.00	.00	0	--	.00	--	.01	.00
10...	--	ND	ND	--	--	ND	ND	ND	ND	--	--
MAY											
08...	--	--	ND	--	--	--	ND	--	ND	--	--
08...	.00	.00	--	.00	.00	0	--	.00	--	.00	.00
JUN											
12...	--	ND	ND	--	--	ND	ND	ND	ND	--	--
12...	.00	.00	--	.00	.00	0	--	.00	--	.00	.00
JUL											
10...	.00	.00	--	.00	.00	0	--	.00	--	.01	.00
AUG											
07...	.00	.00	--	.00	.00	0	--	.00	--	.00	.00
SEP											
11...	.00	.00	--	.00	.00	0	--	.00	--	.00	.00
14...	--	ND	--	--	--	ND	--	ND	--	--	--

ND Material specifically analyzed for but not detected.

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	NOV 14,78	FEB 13,79	MAY 8,79	JUN 12,79
TIME	0900	0830	0845	0830
TOTAL CELLS/ML	3100	300	13000	2900
DIVERSITY: DIVISION	1.5	1.9	1.2	1.4
.CLASS	1.8	2.1	1.2	1.4
..ORDER	2.6	2.1	1.6	1.7
...FAMILY	2.9	2.5	2.1	2.2
....GENUS	3.1	2.5	2.8	3.2

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	--	-	--	-
...HYDRODICTYACEAE								
....PEDIASTRUM	--	-	--	-	340	3	--	-
...MICRACTINIACEAE								
....GOLENKINIA	*	0	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	*	0	15	5	1000	8	270	9
....CHLORELLA	--	-	--	-	86	1	--	-
....CHODATELLA	--	-	--	-	*	0	--	-
....KIRCHNERIELLA	--	-	--	-	770	6	26	1
....NEPHROCYTIUM	--	-	--	-	170	1	--	-
....OOCYSTIS	--	-	--	-	*	0	52	2
....SELENASTRUM	*	0	--	-	--	-	*	0
....TETRAEDRON	--	-	--	-	--	-	52	2
....TREUBARIA	--	-	--	-	--	-	*	0
...SCENEDESMACEAE								
....CRUCIGENIA	110	4	--	-	--	-	--	-
....SCENEDESMUS	83	3	61#	20	2500#	19	700#	24
....TETRASTRUM	--	-	--	-	170	1	670#	23
..TETRASPORALES								
...PALMELLACEAE								
....SPHAEROCYSTIS	--	-	--	-	--	-	--	-
..ULOTRICHALES								
...ULOTRICHACEAE								
....ULOTHRIX	510#	17	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CARTERIA	*	0	--	-	--	-	--	-
....CHLAMYDOMONAS	28	1	--	-	--	-	39	1
...VOLVOCACEAE								
....PANDORINA	--	-	--	-	--	-	--	-
..ZYGNEMATALES								
...DESMIDIACEAE								
....CLOSTERIUM	--	-	--	-	*	0	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	670#	22	--	-	430	3	190	7
....MELOSIRA	130	4	--	-	--	-	180	6
....STEPHANODISCUS	--	-	--	-	--	-	52	2
..PENNALES								
...ACHNANTHACEAE								
....COCCONEIS	*	0	--	-	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	--	-	15	5	--	-	--	-
...FRAGILARIACEAE								
....FRAGILARIA	--	-	--	-	--	-	52	2
...NAVICULACEAE								
....NAVICULA	220	7	15	5	--	-	*	0
...NITZSCHIACEAE								
....NITZSCHIA	190	6	--	-	340	3	150	5
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...MALLOMONADACEAE								
....MALLOMONAS	--	-	15	5	--	-	--	-
...OCHROMONADACEAE								
....OCHROMONAS	180	6	15	5	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	--	-	--	-	*	0

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	NOV 14,78		FEB 13,79		MAY 8,79		JUN 12,79	
TIME	0900		0830		0845		0830	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....AGMENELLUM	140	5	--	-	--	-	--	-
....ANACYSTIS	--	-	140#	45	820	6	390	13
..HORMOGONALES								
...NOSTOCACEAE								
....APHANIZOMENON	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE								
....LYNGBYA	--	-	--	-	1100	8	--	-
....OSCILLATORIA	740#	24	--	-	5500#	41	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....TRACHELOMONAS	--	-	15	5	--	-	*	0
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..GYMNODINIALES								
...GYMNODINIACEAE								
....GYMNODINIUM	--	-	15	5	--	-	--	-

DATE	JUL 10,79		AUG 7,79		SEP 11,79	
TIME	0830		0830		0925	
TOTAL CELLS/ML	2500		7400		15000	
DIVERSITY: DIVISION	1.2		1.3		1.2	
.CLASS	1.2		1.3		1.2	
..ORDER	1.4		2.0		1.5	
...FAMILY	1.9		2.8		2.2	
....GENUS	2.5		3.7		2.9	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...COELASTRACEAE						
....COELASTRUM	--	-	280	4	550	4
...HYDRODICTYACEAE						
....PEDIASTRUM	--	-	230	3	--	-
...MICRACTINIACEAE						
....GOLENKINIA	--	-	--	-	--	-
...OOCYSTACEAE						
....ANKISTRODESMUS	260	10	180	2	180	1
....CHLORELLA	--	-	--	-	--	-
....CHODATELLA	--	-	46	1	--	-
....KIRCHNERIELLA	--	-	480	6	2100	14
....NEPHROCYTIUM	--	-	--	-	--	-
....OOCYSTIS	--	-	210	3	460	3
....SELENASTRUM	--	-	46	1	--	-
....TETRAEDRON	100	4	140	2	92	1
....TREUBARIA	--	-	--	-	--	-
...SCENEDESMACEAE						
....CRUCIGENIA	--	-	250	3	--	-
....SCENEDESMUS	520#	21	1400#	19	4500#	30
....TETRASTRUM	820#	33	710	10	370	2
..TETRASPORALES						
...PALMELLACEAE						
....SPHAEROCYSTIS	--	-	110	2	--	-
..ULOTRICHALES						
...ULOTRICHACEAE						
....ULOTHRIX	--	-	--	-	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CARTERIA	--	-	--	-	--	-
....CHLAMYDOMONAS	--	-	--	-	92	1
...VOLVOCACEAE						
....PANDORINA	--	-	370	5	740	5
..ZYGNEMATALES						
...DESMIDIACEAE						
....CLOSTERIUM	--	-	--	-	--	-

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	JUL 10.79		AUG 7.79		SEP 11.79	
TIME	0830		0830		0925	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHHOOCOCCALES						
...CHROOCOCCACEAE						
....AGMENELLUM	--	-	830	11	3100#	21
....ANACYSTIS	52	2	100	2	1800	12
..HORMOGONALES						
...NOSTOCACEAE						
....APHANIZOMENON	--	-	1200#	17	--	-
...OSCILLATORIACEAE						
....LYNGBYA	--	-	160	2	--	-
....OSCILLATORIA	360	15	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)						
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....TRACHELOMONAS	--	-	--	-	*	0
PYRRHOPHYTA (FIRE ALGAE)						
.DINOPHYCEAE						
..GYMNODINIALES						
...GYMNODINIACEAE						
....GYMNODINIUM	--	-	--	-	--	-
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	310	13	400	6	550	4
....MELOSIRA	--	-	46	1	--	-
....STEPHANODISCUS	--	-	--	-	--	-
..PENNALES						
...ACHNANTHACEAE						
....COCCONEIS	--	-	--	-	--	-
...CYMBELLACEAE						
....CYMBELLA	--	-	--	-	--	-
...FRAGILARIACEAE						
....FRAGILARIA	52	2	--	-	--	-
...NAVICULACEAE						
....NAVICULA	--	-	--	-	--	-
...NITZSCHIACEAE						
....NITZSCHIA	--	-	*	0	*	0
.CHRYSOPHYCEAE						
..CHRYSOMONADALES						
...MALLOMONADACEAE						
....MALLOMONAS	--	-	--	-	--	-
...OCHROMONADACEAE						
....OCHROMONAS	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)						
.CRYPTOPHYCEAE						
..CRYPTOMONADALES						
...CRYPTOMONADACEAE						
....CRYPTOMONAS	--	-	*	0	92	1

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PERIPHYTON

DATE	TIME	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M
NOV					
14...	0900	29.4	.550	33.1	29.6
FEB					
13...	0830	.810	.000	2.13	1.97
MAY					
06...	0945	34.5	6.53	29.5	27.3

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979 ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1530	1800	1690	1610	1290	1060	1170	1190	1180	1210	1190	1200
2	1660	1810	1720	1680	1280	1060	1160	1220	1190	1200	1200	1220
3	1660	1800	1750	1820	1270	1110	1180	1200	1200	1200	1200	1220
4	1630	1770	1740	1690	1250	1100	1170	1190	1190	1200	---	1180
5	1600	1760	1770	1670	1250	1090	1160	1210	1190	1190	---	1180
6	1580	1700	1700	1630	1220	1140	1160	1210	1180	1190	1200	1170
7	1600	1670	1630	1600	1220	1140	1170	1210	1160	1190	1200	1170
8	1620	1620	1650	1600	1230	1130	1160	1210	1170	1190	1200	1150
9	1650	1630	1650	1720	1240	1160	1160	1190	1210	1190	1210	1200
10	1650	1640	1590	1710	1200	1170	1170	1200	1240	1190	1190	1200
11	1640	1740	1610	1750	1180	1170	1160	1200	1200	1180	---	1190
12	1620	1700	1600	1730	1170	1160	1170	1240	1190	1180	---	1200
13	1620	1720	1600	1750	1160	1150	1180	1250	1160	1190	1160	1190
14	1640	1730	1600	1780	1160	1150	1180	1190	1180	1190	1190	1210
15	1650	1730	1570	1790	1140	1130	1190	1190	1200	1200	1210	1230
16	1670	1700	1570	1750	1140	1130	1190	1180	1200	1190	1240	1220
17	1670	1680	1580	1660	1190	1120	1190	1180	1210	1200	1220	1200
18	1650	1650	1580	1640	1160	1120	1200	1180	1210	1190	---	1200
19	1650	1660	1450	1470	1130	1150	1210	1190	1210	1180	---	1190
20	1630	1680	1390	1400	1110	1180	1220	1190	1200	1180	1220	1180
21	1620	1680	1500	1380	1100	1180	1210	1190	1200	---	1220	1190
22	1460	1700	1570	1430	1090	1190	1230	1200	1200	---	1220	1210
23	1450	1680	1610	1420	1080	1200	1220	1190	1200	1200	1170	1220
24	1410	1660	1640	1390	1080	1190	1230	1200	1200	1200	1180	1210
25	1420	1630	1710	1360	1080	1210	1220	1190	1180	1180	---	1210
26	1460	1680	1710	1400	1070	1180	1210	1190	1180	1190	---	1200
27	1590	1650	1760	1380	1070	1160	1220	1230	1190	1190	1180	1190
28	1660	1630	1630	1400	1060	1160	1230	1220	1190	---	1170	1200
29	1750	1730	1580	1410	---	1160	1200	1210	1180	---	1170	1220
30	1760	1710	1580	1330	---	1160	1200	1190	1190	1180	1170	1240
31	1790	---	1610	1320	---	1150	---	1180	---	1190	1170	---
MONTH	1610	1700	1620	1570	1170	1150	1190	1200	1190	1190	---	1200
YEAR	MAX	1820	MIN	1060	MEAN	1340						

09522500 GILA GRAVITY MAIN CANAL AT IMPERIAL DAM, AZ-CA

LOCATION.--Lat 32°52'34", long 114°27'18", in SE¼NW¼ sec.30, T.6 S., R.21 W., Gila and Salt River meridian, Yuma County, Hydrologic Unit 15030107, on right bank 3,200 ft (975 m) downstream from intake at east end of Imperial Dam.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 160.00 ft (48.768 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent except those below 100 ft³/s (2.8 m³/s), which are fair. Gila Gravity Main Canal diverts water from Colorado River at left end of Imperial Dam for irrigation of lands in the Gila Project area in Arizona. Diversions to this canal began Aug. 17, 1943. Diversions to North Gila Valley from this canal began Dec. 16, 1954. During the 1978 calendar year, water was used for irrigation of 97,341 acres (394 km²) divided as follows: North and South Gila Valleys, 15,936 acres (64.5 km²); Mesa Unit, 17,798 acres (72.0 km²); Wellton-Mohawk Division, 60,314 acres (244 km²); Yuma Mesa Auxiliary Division, 3,293 acres (13.3 km²).

AVERAGE DISCHARGE.--20 years (water years 1960-79), 1,191 ft³/s (33.73 m³/s), 862,900 acre-ft/yr (1,060 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,240 ft³/s (63.4 m³/s) May 25, 1965; no flow at canal intake at times in several years when intake gates were closed.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	907	668	142	241	146	997	323	1590	1420	1190	1750	1280
2	1260	771	427	617	229	672	926	1560	1170	1840	1790	982
3	1490	660	291	648	144	376	1040	1590	681	1970	1790	1200
4	1640	617	841	680	196	383	1210	1570	1510	1590	1540	1390
5	1250	681	778	331	381	752	1320	957	1620	1570	1260	1480
6	1260	1090	1090	118	490	841	1150	505	1580	1570	1630	1500
7	850	1350	1220	131	574	833	768	1400	1670	1460	1710	1320
8	845	1110	1020	411	661	926	749	1460	1630	1190	1660	982
9	1280	1190	886	399	539	833	1130	1440	1150	1420	1700	881
10	1540	996	587	373	390	521	1250	1150	851	1720	1640	1430
11	1470	893	920	226	314	388	1190	1090	1430	1740	1200	1440
12	1210	671	799	300	786	1070	1240	1010	1390	1640	781	1480
13	1120	1170	816	247	938	1070	742	568	1160	1640	826	1480
14	922	1020	760	237	1220	1150	503	1410	1930	951	1020	1180
15	540	1180	733	474	1080	1220	392	1510	1800	1010	939	1190
16	988	1040	536	267	954	1050	1140	1480	1700	1460	790	979
17	1110	727	344	12	689	621	1360	1480	1190	1470	301	1260
18	1300	560	208	9.8	470	277	1400	1220	1650	1520	214	1430
19	1040	673	126	8.2	815	912	1410	1090	1700	1700	298	1410
20	772	767	139	6.9	1080	741	1030	736	1810	1280	608	1270
21	388	996	251	6.8	1140	654	920	1310	1770	886	768	1250
22	300	817	341	105	977	681	736	1280	1460	799	1080	886
23	496	501	179	228	655	618	1230	1510	1300	1310	1410	642
24	255	286	21	162	600	112	1530	1220	940	1360	1220	867
25	242	10	78	136	644	79	1660	997	1540	1500	995	1060
26	372	0	665	196	768	670	1580	851	1730	1470	882	1130
27	181	0	661	84	770	735	1300	692	1820	1410	1320	1090
28	111	0	685	12	803	779	799	1390	1670	1170	1420	847
29	227	0	596	182	---	735	634	1500	1440	881	1430	616
30	768	0	268	256	---	662	1360	1650	1270	1680	1720	560
31	659	---	256	161	---	474	---	1560	---	1710	1410	---
TOTAL	26793	20424	16664	7257.7	18445	21754	32030	38776	43790	44107	37102	34512
MEAN	864	681	538	234	659	702	1068	1251	1460	1423	1197	1150
MAX	1640	1350	1220	680	1220	1220	1660	1650	1930	1970	1790	1500
MIN	111	0	21	6.8	144	79	323	505	681	799	214	560
AC-FT	53140	40510	33050	14400	36590	43150	63530	76910	86860	87490	73590	68450

CAL YR 1978 TOTAL 403027.0 MEAN 1104 MAX 2170 MIN 0 AC-FT 799400
WTR YR 1979 TOTAL 341654.7 MEAN 936 MAX 1970 MIN 0 AC-FT 677700

09522500 GILA GRAVITY MAIN CANAL AT IMPERIAL DAM, AZ-CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1956 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: January 1956 to current year

INSTRUMENTATION.--Water temperature recorder January 1956 to current year.

REMARKS.--Unpublished chemical analyses (partial record) for water years 1965-67 available from district office in Tucson, Ariz.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 33.0°C Aug. 29-31, 1970; minimum, 7.0°C Jan. 13-17, 1964, Jan. 4-7, 1971, Jan. 3-8, 1979.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 30.5°C July 24-29; minimum, 7.0°C Jan. 3-8.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO
OCT 18...	1000	1460	1260	8.0	24.0	360	220	88	34	130	44	3.0
JAN 10...	1015	400	1560	7.9	12.0	380	220	95	35	190	52	4.2
MAY 09...	1030	1380	1290	8.0	19.0	370	230	92	33	140	45	3.2

DATE	SODIUM+POTAS-SIUM DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT 18...	--	4.2	0	140	2.7	340	120	.6	9.8	838	812	.10
JAN 10...	--	6.4	0	160	4.0	390	180	.5	11	1020	1010	.18
MAY 09...	190	5.1	0	140	2.7	320	120	.4	9.2	851	804	.00

DATE	TIME	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
OCT 18...	1000	190	30
JAN 10...	1015	250	0
MAY 09...	1030	190	0

09522500 GILA GRAVITY MAIN CANAL AT IMPERIAL DAM, AZ-CA--Continued

WATER-QUALITY RECORDS

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	26.5	26.5	20.5	20.0	13.5	13.0	---	---	10.0	10.0	14.0	14.0
2	26.5	26.0	20.0	20.0	13.0	13.0	8.5	8.0	10.0	10.0	14.0	14.0
3	26.0	26.0	20.0	19.5	13.0	13.0	8.0	7.0	10.0	10.0	14.0	14.0
4	26.0	26.0	19.5	19.0	13.0	12.0	7.0	7.0	10.0	10.0	15.0	14.0
5	26.0	26.0	19.0	19.0	12.0	11.5	7.0	7.0	10.5	10.0	15.0	15.0
6	26.0	25.5	19.0	19.0	11.5	11.0	7.0	7.0	10.5	10.5	15.5	15.0
7	25.5	25.5	19.0	19.0	11.0	10.0	7.0	7.0	10.5	10.5	16.5	15.5
8	25.5	25.5	19.0	19.0	10.0	9.0	8.5	7.0	11.0	10.5	17.0	16.5
9	25.5	25.5	19.0	19.0	9.0	9.0	9.0	8.5	13.5	11.0	18.0	17.0
10	25.5	25.0	19.0	19.0	9.0	9.0	9.0	9.0	14.0	13.5	18.5	18.0
11	25.0	24.5	19.0	19.0	9.0	9.0	9.0	9.0	14.0	14.0	19.0	18.5
12	24.5	24.0	19.0	18.0	9.0	9.0	9.0	9.0	14.0	14.0	19.0	18.0
13	24.0	23.5	18.0	16.0	9.0	9.0	9.0	9.0	14.0	14.0	18.5	18.0
14	24.0	23.5	16.0	15.5	9.5	9.0	9.0	9.0	14.0	14.0	18.5	18.0
15	23.5	23.5	15.5	15.0	9.5	9.5	9.0	9.0	14.0	14.0	18.0	19.0
16	23.5	23.5	15.0	14.5	9.5	9.5	9.0	9.0	14.0	14.0	19.0	18.0
17	23.5	23.5	14.5	14.5	9.5	9.5	9.0	9.0	14.0	14.0	18.0	16.5
18	23.5	23.5	14.5	14.0	9.5	9.5	---	---	14.0	14.0	16.5	16.0
19	23.5	23.5	14.0	14.0	9.5	9.0	---	---	14.0	14.0	16.0	16.0
20	23.5	22.0	14.5	14.0	9.0	9.0	---	---	14.0	14.0	16.0	16.0
21	22.0	21.5	14.5	14.5	9.0	9.0	---	---	14.0	14.0	16.0	16.0
22	22.0	22.0	14.5	14.5	9.5	9.0	11.5	11.5	14.0	14.0	16.0	16.0
23	22.0	21.5	14.5	14.5	9.0	9.0	11.5	11.5	14.0	14.0	16.5	16.0
24	21.5	21.0	14.5	14.5	9.0	9.0	11.5	11.5	14.0	14.0	18.5	16.5
25	21.0	21.0	---	---	8.5	8.5	11.5	11.5	14.0	14.0	19.5	18.5
26	21.0	21.0	---	---	8.5	8.5	11.5	11.5	14.0	14.0	19.5	19.5
27	21.0	20.5	---	---	9.0	8.5	11.5	11.5	14.0	14.0	19.5	19.5
28	20.5	20.5	---	---	9.0	8.5	---	---	14.0	14.0	19.5	19.5
29	20.5	20.5	---	---	9.5	9.0	10.5	10.5	---	---	19.5	18.5
30	20.5	20.5	---	---	9.0	8.5	10.5	10.0	---	---	18.5	18.5
31	20.5	20.5	---	---	---	---	10.0	10.0	---	---	18.5	18.5
MONTH	26.5	20.5	20.5	14.0	13.5	8.5	11.5	7.0	14.0	10.0	19.5	14.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.5	18.5	21.0	20.5	25.0	24.5	28.0	27.0	30.0	29.5	26.5	26.5
2	18.5	18.0	20.5	19.5	25.5	25.0	28.5	27.0	30.0	29.5	26.5	26.5
3	18.5	18.5	20.0	19.5	26.0	25.5	27.0	26.0	29.5	29.5	27.0	26.5
4	18.5	18.5	21.0	20.0	26.0	25.5	26.5	26.0	29.5	29.5	27.0	26.5
5	19.0	18.5	22.0	21.0	26.0	25.5	26.5	26.0	29.5	29.0	26.5	26.5
6	19.5	19.0	22.0	21.5	26.0	25.5	26.5	26.0	29.5	28.5	27.0	26.5
7	20.0	19.5	21.5	20.5	25.5	25.5	27.0	26.5	29.5	29.0	28.0	26.5
8	20.5	20.0	20.5	20.0	25.5	24.5	28.0	26.5	29.5	29.0	28.0	28.0
9	20.5	20.0	20.0	19.0	24.5	24.5	28.5	27.0	29.5	29.0	28.0	28.0
10	20.0	19.5	19.5	19.0	25.0	24.5	28.5	28.0	29.5	29.0	28.0	28.0
11	19.5	19.0	20.0	19.5	25.5	24.5	28.5	27.0	29.5	29.0	28.0	28.0
12	19.0	19.0	21.5	20.0	27.0	25.5	28.5	28.0	29.0	28.5	28.0	27.0
13	19.5	19.0	22.0	21.5	28.0	27.0	28.5	28.5	28.0	27.0	28.0	27.0
14	20.5	19.5	23.0	22.0	28.0	28.0	29.0	28.5	28.0	27.0	28.0	27.0
15	21.0	20.5	23.0	23.0	28.0	28.0	29.0	28.5	28.5	27.0	28.0	26.5
16	21.0	21.0	23.0	23.0	28.0	26.0	29.0	28.5	28.5	28.0	27.0	26.5
17	21.0	21.0	23.0	22.0	26.0	24.5	29.0	28.5	28.0	27.0	26.5	25.0
18	21.0	20.5	23.0	22.0	24.5	23.5	30.0	29.0	27.0	27.0	25.5	25.0
19	20.5	20.5	23.0	23.0	24.0	23.5	30.0	29.5	28.0	27.0	26.0	25.5
20	20.5	20.0	23.0	23.0	24.5	23.5	29.5	29.0	28.0	27.0	26.0	25.5
21	21.0	20.5	23.5	23.0	25.0	24.0	29.0	28.5	28.0	27.0	26.0	26.0
22	21.5	21.0	24.5	23.5	26.0	25.0	29.0	29.0	28.0	27.0	26.0	26.0
23	21.5	21.0	24.5	24.0	26.0	26.0	29.5	29.0	28.0	27.0	26.0	26.0
24	21.0	21.0	25.0	24.5	27.0	26.0	30.5	29.5	28.0	27.0	26.0	26.0
25	21.5	21.0	25.0	24.5	27.0	26.5	30.5	30.0	27.0	26.5	26.0	26.0
26	21.5	20.5	25.0	24.5	28.0	26.5	30.5	30.0	27.0	26.5	26.0	26.0
27	21.0	20.5	25.0	25.0	28.0	27.0	30.5	30.0	27.0	26.5	26.0	26.0
28	21.5	21.0	25.0	24.5	28.0	27.0	30.5	30.5	27.0	26.5	26.0	26.0
29	22.0	21.0	25.0	24.5	28.0	27.0	30.5	30.0	26.5	26.5	26.0	26.0
30	22.0	21.5	25.0	24.5	28.0	27.0	30.0	29.0	26.5	26.5	26.0	25.5
31	---	---	25.0	24.5	---	---	29.5	29.0	26.5	26.5	---	---
MONTH	22.0	18.0	25.0	19.0	28.0	23.5	30.5	26.0	30.0	26.5	28.0	25.0
YEAR	30.5	7.0										

09523000 ALL-AMERICAN CANAL NEAR IMPERIAL DAM, AZ-CA

LOCATION.--Lat 32°52'17", long 114°28'47", in SE¼NW¼ sec.17, T.15 S., R.24 E., San Bernardino meridian, in California, Imperial County, Hydrologic Unit 15030107, on left bank 6,000 ft (1,829 m) downstream from intake at west end of Imperial Dam and 13.7 mi (22.0 km) upstream from turnout to Yuma Main Canal.

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1939 monthly discharge only, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 150.00 ft (45.720 m) National Geodetic Vertical Datum of 1929 (subject to undetermined changes caused by earthquake of May 18, 1940). Since Aug. 21, 1952, auxiliary water-stage recorder 18.5 mi (29.8 km) downstream from base gage.

REMARKS.--Records excellent. All-American Canal diverts water from Colorado River at Imperial Dam. Water is used for power development and for irrigation in Yuma, Coachella, and Imperial Valleys. Water can be released back to the river through Pilot Knob powerplant and wasteway for power, regulatory purposes, or for downstream use in Mexico. First diversion to All-American Canal began October 1938, but prior to October 1940 was used only for priming canal.

COOPERATION.--Daily discharge figures furnished by Imperial Irrigation District (discharge figures reviewed in accordance with Geological Survey standard practice).

AVERAGE DISCHARGE.--38 years (water years 1942-79), 6,897 ft³/s (195.3 m³/s), 4,997,000 acre-ft/yr (6,160 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 13,500 ft³/s (382 m³/s), Apr. 16, 1958; no flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5710	3070	2570	2630	2480	5050	7660	7710	8710	10000	10800	9160
2	5580	3290	3110	2950	2480	4890	8100	8870	8740	9900	11100	8840
3	5710	3390	2910	3320	1870	4910	8420	8570	8180	10200	11100	9190
4	5890	3790	2980	3380	1450	4940	8710	8500	8150	10300	11300	9360
5	5910	3490	3840	3680	2090	5400	9070	9040	8250	10500	11200	9780
6	5640	4010	4010	2660	2340	5470	9070	8830	8430	10500	10900	9940
7	5510	4000	4990	2050	2430	5440	9230	8580	9060	10300	10900	9620
8	5460	4480	4560	2110	2890	5810	9220	8510	8910	10100	11200	9540
9	5650	4880	4550	2260	3190	5580	9190	9110	8380	10300	11200	8970
10	5700	4570	4300	2630	3350	5630	9110	8770	8470	10400	10600	8550
11	5690	3990	4470	2930	3380	5420	9120	8320	8770	10700	10600	8620
12	5330	3620	4860	2970	4390	5770	8910	7910	9140	10900	10600	8830
13	4960	3890	4890	2720	4660	6360	8870	8600	9340	11200	10800	8880
14	4780	4120	5170	2780	4870	6780	8990	9230	8880	11300	11200	8520
15	4450	4440	5150	3070	5100	6730	8690	9600	8860	11100	10100	7950
16	4750	4280	4990	2980	4930	6670	9170	9750	9000	11100	8450	8010
17	4920	4410	3890	2060	4750	6760	9270	9690	8950	11200	8910	8130
18	5080	4350	2920	1490	4330	6550	9210	9900	9050	11200	10700	8460
19	5300	3890	2390	1290	4650	6520	9250	9900	9340	11100	9330	8730
20	5260	3820	2500	1110	4890	6520	9240	9600	9710	11200	8540	8920
21	2630	3930	2700	1020	5100	6730	9370	9770	10100	11100	8470	8790
22	3120	3630	3230	1550	5150	6530	9330	9550	9950	11100	9040	8810
23	3550	3230	3030	1720	4980	6930	9070	8930	9960	10200	9160	8690
24	2670	2640	2940	2020	5000	7120	9170	9020	10000	9650	9330	8760
25	2200	1890	2630	1710	4700	6910	9190	9020	10200	10000	9330	8850
26	2350	1920	3320	1550	4990	6290	9000	8420	10400	10300	9530	8910
27	2430	1860	3740	1620	4680	6410	8670	7890	10500	10400	9570	9070
28	2540	2070	3840	1590	4900	7080	7740	7690	10400	10400	9860	9100
29	2620	2060	3820	2100	---	7050	7490	7860	10300	10600	9950	8770
30	2780	2300	3350	2670	---	7510	7430	8200	10100	10700	9750	8200
31	2920	---	3020	2620	---	8070	---	8260	---	10600	9480	---
TOTAL	137090	105310	114650	71240	109940	193750	264960	273680	278230	328630	313000	266030
MEAN	4422	3510	3698	2298	3926	6250	8832	8828	9274	10600	10100	8868
MAX	5910	4880	5170	3680	5150	8070	9370	9900	10500	11300	11300	9940
MIN	2200	1860	2390	1020	1450	4890	7430	7690	8150	9650	8450	7950
AC-FT	271900	208900	227400	141300	218100	384300	525500	542800	551900	651800	620800	527700

CAL YR 1978 TOTAL 2269675 MEAN 6218 MAX 11100 MIN 720 AC-FT 4502000
WTR YR 1979 TOTAL 2456510 MEAN 6730 MAX 11300 MIN 1020 AC-FT 4872000

09527000 PILOT KNOB POWERPLANT AND WASTEWAY NEAR PILOT KNOB, CA

LOCATION.--Lat 32°44'15", long 114°42'56", in NW¼SW¼ sec.25, T.16 S., R.21 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030107, 2 mi (3 km) east of summit of Pilot Knob, 6 mi (10 km) west of Yuma, Ariz., and 20.8 mi (33.5 km) downstream from intake of All-American Canal at Imperial Dam.

PERIOD OF RECORD.--February 1939 to current year. Prior to October 1943 monthly discharge only, published in WSP 1313. Prior to October 1956, published as Pilot Knob wasteway near Pilot Knob.

GAGE.--Totalizing flowmeter on each turbine. In addition, water-stage recorder in forebay on right bank of All American Canal (also used as auxiliary gage for sta 09527500); tailrace gage with remote recorder logged hourly in control house; calibrated wicket gates for turbine flow and calibrated bypass gates for wasteway flow which are logged for each change. Datum of forebay staff gage is 150.00 ft (45.720 m); that of tailrace staff gage is 0.00 ft (0.000 m); elevation of sill of bypass gates is 147.88 ft (45.074 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent above 1,200 ft³/s (34.0 m³/s) and good below. Daily discharge computed from flowmeter equipment or from head and gate openings on wicket gates. Records show water released through Pilot Knob powerplant and wasteway from All-American Canal and returned to Colorado River through Rockwood gates. Pilot Knob wasteway completed in summer of 1938 and first flow occurred Feb. 5, 1939. Pilot Knob powerplant was completed in January 1957 and first flow occurred Jan. 14, 1957. See table below for monthly return flow by Pilot Knob wasteway only.

COOPERATION.--Midnight readings of flowmeter, recorder graph of forebay, and record of tailrace elevation and gate openings furnished by Imperial Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 8,350 ft³/s (236 m³/s) Jan. 26, 1958; no flow for long periods.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	1080		0	1060	0	2500	3300	3000	2700
2			0	0		0	1220	1020	2500	3300	3170	2900
3			0	0		0	1320	1020	2500	3350	3200	2900
4			0	0		0	1400	1000	2500	3350	3500	2900
5			0	0		0	1220	1500	2500	3400	3500	2930
6			34	0		0	1100	1500	2500	3450	3500	2960
7			973	0		0	1300	1500	2500	3460	3500	2810
8			947	0		0	1330	1500	2500	3480	3500	2600
9			1020	0		0	1410	2000	2500	3450	3470	2600
10			1100	0		0	1420	2000	2500	3450	2720	2500
11			1160	0		0	1400	2000	2470	3450	3500	2500
12			1150	0		0	1430	2000	2470	3480	4540	2500
13			1200	0		0	1500	2500	2475	3600	6150	2500
14			1150	0		0	1550	2530	1720	3600	6940	2340
15			1100	0		0	1540	2530	1600	3730	5330	2030
16			1380	0		0	1620	2530	1980	3440	3420	1980
17			1210	0		0	1700	2530	2590	3350	4270	2100
18			1200	0		0	1660	2520	2920	3350	6000	2200
19			1200	0		46	1610	2500	3000	3400	4850	2370
20			1140	0		2370	1600	2500	3000	4210	3320	2700
21			1040	0		3530	1600	2500	3000	6080	3100	2560
22			1470	0		2320	1490	2500	3000	6670	3200	2570
23			1490	0		2800	1100	2500	3000	4700	2720	2700
24			1500	0		2800	1020	2500	3090	3500	2300	2520
25			1520	0		2600	862	2030	3130	3500	2300	2510
26			1550	0		1630	0	2840	3000	3320	2600	2500
27			1250	0		1140	0	2830	3000	3200	2700	2500
28			1260	0		1010	0	2760	3000	3200	2700	2500
29			1380	0	---	988	0	2500	3000	3200	2800	2500
30			1440	0	---	993	0	2500	3050	3100	2810	2500
31		---	1330	0	---	1040	---	2500	---	3000	2700	---
TOTAL	0	0	31194	1080	0	23347	34542	65940	79690	113150	111310	76680
MEAN	0	0	1006	34.8	0	753	1151	2127	2650	3650	3591	2555
MAX	0	0	1550	1080	0	3530	1700	2840	3130	6670	6940	2960
MIN	0	0	0	0	0	0	0	0	1600	3000	2300	1980
AC-FT	0	0	61870	2140	0	46310	68510	130800	157700	224400	220800	152100

CAL YR 1978 TOTAL 376243.00 MEAN 1031 MAX 3290 MIN 0 AC-FT 746300
WTR YR 1979 TOTAL 536713.00 MEAN 1470 MAX 6940 MIN 0 AC-FT 1065000

09527500 ALL-AMERICAN CANAL BELOW PILOT KNOB WASTEWAY, CA

LOCATION.--Lat 32°44'07", long 114°43'23", in NW¼SE¼ sec.26, T.16 S., R.21 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030107, on left bank 0.4 mi (0.6 km) downstream from Pilot Knob wasteway, 6 mi (10 km) west of Yuma, Ariz., 15 mi (24 km) upstream from turnout to Coachella Canal, and 21.2 mi (34.1 km) downstream from intake at Imperial Dam.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 150.00 ft (45.720 m) National Geodetic Vertical Datum of 1929. Auxiliary water-stage recorder on right bank 0.4 mi (0.6 km) upstream used to determine head on Pilot Knob check gates (also used as forebay gage for sta 09527000, Pilot Knob powerplant and wasteway). Datum of auxiliary gage is 150.00 ft (45.720 m) NGVD.

REMARKS.--Records excellent. Water is used for power development at three sites below station, and for irrigation in Coachella and Imperial Valleys.

COOPERATION.--Gage-height record and log of gate operation furnished by Imperial Irrigation District.

AVERAGE DISCHARGE.--18 years, 4,687 ft³/s (132.7 m³/s), 3,396,000 acre-ft/yr (4,190 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 7,610 ft³/s (216 m³/s) April 27, 28, 1976; no flow Jan. 4, 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5050	2450	1890	1100	2150	4270	6160	6660	5250	6020	6460	5710
2	4840	2670	2220	1720	2150	4200	6340	6790	5340	5940	6520	5430
3	4850	2760	1990	2220	1750	4320	6470	6600	5150	6140	6480	5740
4	4990	3280	2040	2340	1320	4540	6620	6520	5210	6100	6350	5790
5	5020	3280	2800	2230	1040	4930	6850	6540	5270	6080	6390	6000
6	4910	3700	2910	1730	2100	4970	6890	6400	5240	6080	6370	6100
7	4760	3690	3290	1050	2140	4790	7110	6140	5520	5990	6390	6010
8	4680	3950	2910	1000	2480	4860	7150	6050	5450	5920	6520	6020
9	4740	4070	2920	1220	2800	4600	6900	6200	5080	5930	6455	5800
10	4800	3740	2820	1400	2940	4610	6910	6070	5260	5940	6700	5460
11	4060	3150	2910	1910	2910	4580	7010	5790	5470	6140	6250	5400
12	4570	2840	3290	1900	3670	4920	6700	5430	5670	6310	5640	5580
13	4170	3140	3350	1620	3920	5300	6530	5560	5770	6490	4370	5630
14	4000	3330	3610	1640	4100	5590	6710	6020	6030	6550	4030	5550
15	3740	3650	3640	1950	4280	5590	6730	6350	6110	6480	4410	5350
16	3900	3530	3480	2040	4150	5640	6990	6370	5930	6480	4650	5450
17	4050	3690	2490	1220	4160	5960	6910	6310	5420	6560	4210	5540
18	4140	3740	1470	764	3970	5920	6850	6480	5310	6640	4470	5620
19	4360	3400	885	974	4150	5910	6710	6490	5570	6530	4350	5680
20	4410	3180	1060	844	4330	3830	6730	6350	5860	6070	4900	5620
21	2340	3220	1250	823	4410	2670	6870	6470	6150	4400	5010	5630
22	3090	3020	1460	1160	4310	3470	7020	6220	6000	3950	5270	5620
23	3270	2660	1310	1350	4130	3450	7040	5580	6110	4620	5720	5510
24	2380	2020	1190	1690	4360	3770	7010	5610	6190	5090	6170	5630
25	1890	1320	817	1220	4200	3920	7130	5370	6220	5260	6190	5710
26	1950	1290	1370	1180	4210	4120	7070	4900	6440	5610	6130	5740
27	2010	1380	2080	1290	3920	4620	7100	4530	6420	5940	6060	5750
28	2150	1700	2150	1290	4170	5150	6710	4340	6280	6050	6300	5820
29	2130	1760	1970	1790	---	5260	6770	4620	6340	6200	6310	5610
30	2170	1930	1480	2360	---	5680	6610	4940	6260	6320	6100	5270
31	2260	---	1290	2320	---	6270	---	4900	---	6350	6000	---
TOTAL	116480	87380	68342	47425	95020	147710	204680	182760	172320	184130	177250	169850
MEAN	3757	2913	2205	1530	3394	4765	6820	5895	5744	5940	5718	5662
MAX	5050	4070	3640	2360	4410	6270	7150	6790	6440	6640	6700	6100
MIN	1890	1290	817	764	1320	2670	6160	4340	5000	3950	4030	5270
AC-FT	231000	173300	135600	94070	188500	293000	405800	362500	341800	365200	351600	336900

CAL YR 1978 TOTAL 1621788 MEAN 4443 MAX 6980 MIN 647 AC-FT 3217000
WTR YR 1979 TOTAL 1653267 MEAN 4529 MAX 7150 MIN 764 AC-FT 3279000

09527600 ALL AMERICAN CANAL BELOW DROP 1, NEAR CALEXICO, CA

LOCATION.--Lat 32°42'19", long 114°58'01", in SE¼NE¼NE¼ sec.1, T.16 S., R.19 E., Imperial County, Hydrologic Unit 18100200, on right bank of canal, 30 mi (48 km) east of Calexico, and 1.5 mi (2.4 km) below Drop 1 and the diversion to Coachella Canal.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.
CHEMICAL ANALYSES: Water years 1977 to current year.

COOPERATION.--Discharge records were furnished by Imperial Irrigation District.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
NOV 29...	0915	1175	--	13.0	370	220	93	34	140
MAR 29...	1030	1220	8.3	10.0	370	220	96	32	130
MAY 29...	1450	1260	8.4	26.0	380	230	96	35	150
JUL 19...	1230	1260	7.9	29.5	330	260	79	32	120

DATE	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	SODIUM+POTAS-SIUM DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
NOV 29...	51	4.1	--	6.7	150	380	170	.4	12
MAR 29...	43	2.9	--	5.2	150	340	130	.4	8.9
MAY 29...	46	3.3	160	5.8	150	340	130	.5	9.8
JUL 19...	44	2.9	130	5.4	70	330	120	.4	9.6

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
NOV 29...	960	.23	.02	.03	.56	.58	--	.02	.01
MAR 29...	834	.16	.14	.18	.44	.58	.74	.01	.00
MAY 29...	858	.18	.04	.05	.45	.49	.67	.02	.05
JUL 19...	740	.24	.23	.30	.18	.41	.65	.19	.12

DATE	TIME	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	DATE	TIME	NAPH-THA-LENES, POLY-CHLOR, TOTAL (UG/L)	PCB, TOTAL (UG/L)
NOV 29...	0915	250	10	NOV 29...	0915	.00	.0
MAR 29...	1030	190	10	MAR 29...	1030	--	.0
MAY 29...	1450	200	10	MAY 29...	1645	--	.0
JUL 19...	1230	260	<8				

< Actual value is known to be less than the value shown.

09527600 ALL-AMERICAN CANAL BELOW DROP 1, NEAR CALEXICO, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ATRA-ZINE, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)
OCT										
20...	1430	--	--	--	--	--	--	--	--	--
NOV										
08...	1500	--	--	--	--	--	--	--	--	--
29...	0915	.00	.00	.0	.00	.00	.00	.00	.00	.00
DEC										
13...	1540	.00	--	--	--	--	--	--	--	--
MAR										
29...	1030	.00	.00	.0	.00	.00	.00	.00	.00	.00
MAY										
29...	1450	.00	--	--	--	--	--	--	--	--
29...	1645	--	.00	.0	.00	.00	.00	.00	.00	.00

DATE	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)
OCT										
20...	--	--	--	--	--	--	--	--	--	--
NOV										
08...	--	--	--	--	--	--	--	--	--	--
29...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
DEC										
13...	--	--	--	--	--	--	--	--	--	--
MAR										
29...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAY										
29...	--	--	--	--	--	--	--	--	--	--
29...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	PER-THANE TOTAL (UG/L)	PHOS-DRIN, TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	SIMA-ZINE TOTAL (UG/L)	SIME-TRYNE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)
OCT									
20...	.00	--	--	--	--	--	--	--	--
NOV									
08...	.00	--	--	--	--	--	--	--	--
29...	.00	.00	.00	--	--	0	.00	.01	.00
DEC									
13...	.00	.00	--	--	--	--	--	--	--
MAR									
29...	.00	.00	.00	--	--	0	.00	.01	.00
MAY									
29...	--	.00	--	.0	.0	--	--	--	--
29...	.00	--	.00	--	--	0	.00	.19	.00

Return surface flows below Imperial Dam, AZ-CA

Between Imperial Dam and the international boundary return surface flows from irrigated areas enter the Colorado River through many drains and wasteways in Arizona and California. Other return flows enter the Gila River below the gaging station near Dome (09520500). In addition, return flows collected by the Main Drain and East Main Canal are delivered across the international boundary for use in Mexico.

Diversions for irrigation in the Gila Project in Arizona are made at Imperial Dam by the Gila Gravity Main Canal. (See sta 09522500.) Diversions for the Yuma Project in Arizona and California are made at Imperial Dam by the All-American Canal (see sta 09523000) and by the Yuma Main Canal. (See stas 09524000 and 09525500.)

See figure 4 on p. 136 for the schematic diagram showing location of diversions and return flows.

09525000. YUMA MAIN CANAL WASTEWAY.--See daily table elsewhere in this report.

09527000. PILOT KNOB POWERPLANT AND WASTEWAY.--See daily table elsewhere in this report.

09527900. MITTRY LAKE OUTLET CHANNEL.

LOCATION.--Water-stage recorder and sharp-crested weir, in NW¼SE¼ sec.14, T.7 S., R.22 W., Hydrologic Unit 15030107, 1,000 ft (300 m) upstream from outlet to Colorado River and Laguna Dam.

PERIOD OF RECORD.--Monthly discharge October 1974 to current year.

REMARKS.--Record shows return flow to Colorado River from Mittry Lake. Prior to Nov. 6, 1974, records furnished by Bureau of Reclamation.

09528600. LAGUNA CANAL WASTEWAY.

LOCATION.--Water-stage recorder and sharp-crested weir, in SE¼SW¼ sec. 14, T.7 S., R.22 W., Hydrologic Unit 15030107, 1,000 ft (300 m) downstream from Laguna Dam and 0.7 mi (1.1 km) upstream from outlet to Colorado River.

PERIOD OF RECORD.--Monthly discharge October 1960 to current year.

REMARKS.--Record shows waste water from North Gila Valley Irrigation District returned to Colorado River. Flow record computed from standard weir rating.

09528800. LEVEE CANAL WASTEWAY.

LOCATION.--Water-stage recorder and sharp-crested weir, in SE¼SW¼ sec.4, T.8 S., R.22 W., Hydrologic Unit 15030107, 1,000 ft (300 m) upstream from outlet to Colorado River.

PERIOD OF RECORD.--Monthly discharge October 1960 to current year.

REMARKS.--Record shows waste water from North Gila Valley Irrigation District returned to Colorado River.

09529000. NORTH GILA DRAIN NO. 1.

LOCATION.--Water-stage recorder, in SE¼SW¼ sec.4, T.8 S., R.22 W., Hydrologic Unit 15030107, 0.25 mi (0.40 km) upstream from outlet to Colorado River and 5.5 mi (8.8 km) downstream from Laguna Dam. No gage prior to Oct. 16, 1974.

PERIOD OF RECORD.--Monthly discharge October 1960 to current year.

REMARKS.--Record shows waste water from North Gila Valley Irrigation District returned to Colorado River. Prior to Oct. 16, 1974, flow records were computed by interpolation between discharge measurements made monthly.

09529050. NORTH GILA DRAIN NO. 3.

LOCATION.--Drain enters wasteway to Gila River in NE¼NE¼ sec.18, T.8 S., R.21 W., Hydrologic Unit 15070201, 1,000 ft (300 m) upstream from Gila River.

PERIOD OF RECORD.--Monthly discharge April 1962 to current year.

REMARKS.--Record shows seepage from Gila Gravity Main Canal. There is no gage; records are computed by interpolation between discharge measurements made monthly.

09529100. FORTUNA WASTEWAY.

LOCATION.--Water-stage recorder and sharp-crested weir, in NE¼ sec.30, T.8 S., R.21 W., Hydrologic Unit 15070201, 1.3 mi (2.1 km) upstream from Gila River.

PERIOD OF RECORD.--Monthly discharge October 1960 to September 1963, October 1964 to current year.

REMARKS.--Record shows waste water spilled from Gila Gravity Main Canal; flow rarely reaches Gila River.

09529150. NORTH GILA MAIN CANAL WASTEWAY.

LOCATION.--Water-stage recorder in NE¼NW¼ sec.22, T.8 S., R.22 W., Hydrologic Unit 15070201, 1,000 ft (300 m) upstream from outlet to Gila River. Prior to July 1966 water-stage recorder and sharp-crested weir, 1 mi (1.6 km) upstream from outlet to Gila River.

PERIOD OF RECORD.--Monthly discharge October 1960 to current year.

REMARKS.--Record shows waste water from North Gila Valley Irrigation District. Prior to July 1966 record shows waste water less flow diverted for irrigation between gage and Gila River.

09529160. SOUTH GILA PUMP OUTLET CHANNEL NO. 3.

LOCATION.--Water-stage recorder in NW¼SE¼ sec.22, T.8 S., R.22 W., Hydrologic Unit 15070201, 0.5 mi (0.8 km) upstream from outlet to Gila River. Prior to Aug. 1, 1965, record obtained by Badger total-flow meter about 500 ft (150 m) downstream.

PERIOD OF RECORD.--Monthly discharge January 1965 to current year.

REMARKS.--Record shows water pumped from wells in South Gila Valley Unit.

Return surface flows below Imperial Dam, AZ-CA--Continued

09529200. BRUCE CHURCH DRAIN.
LOCATION.--At culvert in NW¼NE¼ sec.21, T.8 S., R.22 W., Hydrologic Unit 15070201, 0.2 mi (0.3 km) upstream from outlet to Gila River.

PERIOD OF RECORD.--Monthly discharge April 1962 to current year.

REMARKS.--Record shows seepage water from parts of secs. 15, 16, and 21 (Bruce Church Ranch). Flow generally computed by interpolation between discharge measurements; prior to Nov. 30, 1970, and May to Sept. 1979, flow determined from pump rating.

09529240. SOUTH GILA PUMP OUTLET CHANNEL NO. 2.
LOCATION.--Water-stage recorder in SW¼NW¼ sec.28, T.8 S., R.22 W., Hydrologic Unit 15070201, 0.6 mi (1.0 km) upstream from outlet to Gila River; prior to Oct. 18, 1965, outlet was to Wellton-Mohawk Main Outlet Drain. Prior to Aug. 1, 1965, Sparling meter at outlet to Wellton-Mohawk Main Outlet Drain.

PERIOD OF RECORD.--Monthly discharge January 1962 to current year.

REMARKS.--Record shows water pumped from wells in South Gila Valley Unit and conveyed by concrete channel to the Gila River.

09529250. BRUCE CHURCH WASTEWAY.
LOCATION.--Water-stage recorder and sharp-crested weir, in SE¼SE¼ sec.20, T.8 S., R.22 W., Hydrologic Unit 15070201, 500 ft (150 m) upstream from outlet to Gila River.

PERIOD OF RECORD.--Monthly discharge October 1960 to current year.

REMARKS.--Record shows waste water from North Gila Valley Irrigation District returned to Gila River.

09529300. WELLTON-MOHAWK MAIN OUTLET DRAIN (CONVEYANCE CHANNEL).
LOCATION.--Water-stage recorder and Parshall flume in NE¼NW¼ sec.17, T.8 S., R.21 W., Hydrologic Unit 15070201, 7.8 mi (12.6 km) upstream from outlet to Gila River (M.O.D.E. 1), which is 0.6 mi (1.0 km) upstream from mouth of Gila River. Prior to Feb. 20, 1962, gage heights measured from reference point on measuring bridge. Prior to Oct. 1, 1974, gage located 1,000 ft (300 m) upstream without Parshall flume.

PERIOD OF RECORD.--Monthly discharge October 1960 to current year.

REMARKS.--Record shows water pumped from numerous wells in Wellton-Mohawk Irrigation and Drainage District to lower the water table. Flow can be discharged to the Gila River or Colorado River by any one of or combination of three outlets. These outlets are known as: M.O.D.E. 1 (release to Gila River about 8.0 mi (13 km) below station); M.O.D.E. 2 (see sta 09531800), release to Colorado River above Morelos Dam; and M.O.D.E. 3 (see sta 09531900), release to Colorado River below Morelos Dam. Since June 1977 discharge of drain has been released to Wellton-Mohawk Bypass Drain and measured at Arizona-Sonora boundary (see sta 09533300). For water year 1979, no water was released to Gila River through M.O.D.E. 1.

09529360. SOUTH GILA PUMP OUTLET CHANNEL NO. 1.
LOCATION.--Water-stage recorder in SW¼NE¼ sec.30, T.8 S., R.22 W., Hydrologic Unit 15070201, 0.2 mi (0.3 km) upstream from outlet to Gila River, which is 0.6 mi (1.0 km) upstream from mouth of Gila River. Prior to Aug. 1, 1965, Sparling flowmeter 300 feet (90 m) upstream.

PERIOD OF RECORD.--Monthly discharge August 1961 to current year.

REMARKS.--Record shows water pumped from wells in South Gila Valley Unit and conveyed by concrete channel to Gila River.

09529400. SOUTH GILA DRAIN NO. 2.
LOCATION.--Near center of sec.24, T.8 S., R.23 W., Hydrologic Unit 15030107, at outlet to Colorado River. Prior to Oct. 1, 1969, Sparling flowmeter at same site.

PERIOD OF RECORD.--Monthly discharge October 1960 to current year.

REMARKS.--Record shows ground-water drainage and occasional waste water from South Gila Valley Unit returned to Colorado River. There is no gage; flow record computed by interpolation between discharge measurements made bimonthly.

09529420. SOUTH GILA TERMINAL WASTEWAY.
LOCATION.--Water-stage recorder and Parshall flume in SW¼NW¼ sec.36, T.8 S., R.23 W., Hydrologic Unit 15030107, 2.0 mi (3.2 km) upstream from outlet to Colorado River. Prior to Aug. 1, 1965, total-flow meter at same site.

PERIOD OF RECORD.--Monthly discharge March 1965 to current year.

REMARKS.--Record shows waste water from South Gila Canal of South Gila Valley Unit returned to Colorado River.

09529440. SOUTH GILA PUMP OUTLET CHANNEL NO. 4.
LOCATION.--Water-stage recorder and broad-crested weir, in NW¼NW¼ sec.26, T.8 S., R.23 W., Hydrologic Unit 15030107, 1.5 mi (2.4 km) upstream from outlet to Colorado River.

PERIOD OF RECORD.--Monthly discharge July 1965 to current year.

REMARKS.--Records shows water pumped from wells in South Gila Valley Unit and conveyed by buried pipe and some open unlined channel to Colorado River.

09529600.--RESERVATION DRAIN NO. 7.
LOCATION.--At downstream end of culvert on State Road 24 (formerly Avenue C), in NE¼NE¼ sec.33, T.15 S., R.23 E., Hydrologic Unit 15030107, San Bernardino meridian, 0.5 mi (0.8 km) upstream from outlet to Reservation Main Drain. Prior to Oct. 1, 1969, nonrecording gage at same site.

PERIOD OF RECORD.--Monthly discharge March 1966 to current year.

REMARKS.--Record shows drainage water from sec.34, T.15 S., R.23 E., and is used with sta 09529700 to determine seepage from All-American Canal. There is no gage; flow record computed by interpolation between discharge measurements made monthly. Beginning June 20, 1967, Imperial Irrigation District makes discharge measurements weekly.

Return surface flows below Imperial Dam, AZ-CA--Continued

09529700. RESERVATION MAIN DRAIN NO. 6.

LOCATION.--Nonrecording gage on upstream right piling of Stallnacker Road Bridge (formerly 9th Street Bridge), in SE¼SW¼ sec.32, T.15 S., R.23 E., Hydrologic Unit 15030107, San Bernardino meridian.

PERIOD OF RECORD.--Monthly discharge March 1966 to current year.

REMARKS.--Record shows waste and drainage water from the Reservation Division, and is used with sta 09529600 to determine seepage from All-American Canal, which parallels drain for 4 mi (6.4 km). Flow record computed by interpolation between discharge measurements made monthly. The Imperial Irrigation District makes discharge measurements weekly.

09529800. RESERVATION DRAIN NO. 2.

LOCATION.--At upstream side of bridge on White Road (formerly 8th Street), in SW¼NW¼ sec.6, T.16 S., R.23 E., Hydrologic Unit 15030107, San Bernardino meridian, 0.9 mi (1.4 km) upstream from outlet to Reservation Main Drain.

PERIOD OF RECORD.--Monthly discharge March 1966 to current year.

REMARKS.--Record used to compute seepage from All-American Canal in sec.31, T.15 S., R.22 E. There is no gage; flow record computed by interpolation between discharge measurements made monthly. The Imperial Irrigation District makes discharge measurements weekly.

09529900. RESERVATION DRAIN NO. 3.

LOCATION.--At Jackson Road Bridge (formerly 5th Street Bridge), in SE¼SE¼ sec.10, T.16 S., R.22 E., Hydrologic Unit 15030107, San Bernardino meridian, 1.0 mi (1.6 km) upstream from outlet to Reservation Main Drain.

PERIOD OF RECORD.--Monthly discharge March 1966 to current year.

REMARKS.--Record used to compute seepage from All-American Canal upstream from Yuma Main Canal. There is no gage; flow record computed by interpolation between discharge measurements made monthly. Imperial Irrigation District makes discharge measurements weekly.

09530000. RESERVATION MAIN DRAIN NO. 4.

LOCATION.--Water-stage recorder in NW¼SE¼ sec.26, T.16 S., R.22 E., Hydrologic Unit 15030107, San Bernardino meridian, 500 ft (150 m) upstream from railroad culvert. Prior to January 1937, no gage. January 1937 to Apr. 16, 1941, nonrecording gages at culvert 500 ft (150 m) downstream at different datums. April 16, 1941, to Dec. 16, 1971, water-stage recorder at culvert 500 ft (150 m) downstream. May 29, 1974, to Feb. 2, 1976, water-stage recorder with vane meter at present site. Flow enters Yuma Main Canal wasteway channel 200 ft (60 m) downstream from spillway structure. Prior to May 1955 it entered 500 ft (150 m) upstream from outlet of Yuma Main Canal wasteway in SE¼SW¼ sec.26, T.16 S., R.22 E., San Bernardino meridian.

PERIOD OF RECORD.--Monthly discharge January 1913 to April 1920, October 1921 to March 1925, January 1934 to current year (calendar year discharge only 1934-36). Prior to October 1955, published as California drainage canal.

REMARKS.--Record shows waste and drainage water from area east of Yuma Main Canal on Reservation Division. Since 1939, seepage from All-American Canal has caused large increase. Flow is not included in the record of Yuma Main Canal wasteway.

09530200. YUMA MESA OUTLET DRAIN.

LOCATION.--Venturi meter with recorder in SE¼SW¼ sec.28, T.16 S., R.22 E., Hydrologic Unit 15030108, San Bernardino meridian, in Arizona, Yuma County, 0.3 mi (0.5 km) from outlet to Colorado River.

PERIOD OF RECORD.--Monthly discharge July 1970 to current year.

REMARKS.--Record shows water pumped from wells on the Yuma Mesa and conveyed by underground conduit to Colorado River.

COOPERATION.--Records furnished by Bureau of Reclamation prior to July 21, 1972.

09530400. RESERVATION DRAIN NO. 11.

LOCATION.--At outlet to Drain 8-B (Araz Drain), in NE¼NE¼ sec.19, T.16 S., R.22 E., Hydrologic Unit 15030107, San Bernardino meridian.

PERIOD OF RECORD.--Monthly discharge March 1966 to current year.

REMARKS.--Record shows drainage from sec.20, T.16 S., R.22 E. Flow at this station, with that at sta 09530500, is used to determine seepage from All-American Canal. There is no gage; flow record computed by interpolation between discharge measurements made monthly. Beginning June 20, 1967, Imperial Irrigation District makes discharge measurements weekly.

09530500. DRAIN 8-B.

LOCATION.--Enters Colorado River in SW¼SW¼ sec.19, T.16 S., R.22 E., Hydrologic Unit 15030107, San Bernardino meridian, 4 mi (6.4 km) downstream from outlet of Yuma Main Canal wasteway.

PERIOD OF RECORD.--Monthly discharge March 1948 to current year. Prior to October 1955, published as Araz Drain.

REMARKS.--Record shows seepage from All-American Canal and waste and drainage water west of Yuma Main Canal on the Reservation Division. Flow at this station, with that at sta 09530400, is used to determine seepage from All-American Canal. There is no gage, but due to fairly constant drainage, flow record is computed by interpolation between discharge measurements made monthly. Imperial Irrigation District makes discharge measurements weekly at site 1,000 ft (300 m) upstream.

09531800. MAIN OUTLET DRAIN EXTENSION ABOVE MORELOS DAM (M.O.D.E. 2).

LOCATION.--Water-stage recorder and Parshall flume in NW¼NW¼ sec.36, T.16 S., R.21 E., Hydrologic Unit 15030107, San Bernardino meridian, at outlet to Colorado River, 1.7 mi (2.7 km) upstream from Morelos Dam.

PERIOD OF RECORD.--Monthly discharge November 1965 to current year.

REMARKS.--Record shows water conveyed to Colorado River 1.7 mi (2.7 km) above Morelos Dam, from numerous drainage wells in Wellton-Mohawk Irrigation and Drainage District. No flow since July 24, 1973. (See also stas 09529300 and 09531900.)

Return surface flows below Imperial Dam, AZ-CA--Continued

09531850. COOPER WASTEWAY.

LOCATION.--Water-stage recorder and weir, in NE¼NE¼ sec.28, T.8 S., R.24 W., Hydrologic Unit 15030108, 0.6 mi (1.0 km) upstream from Morelos Dam. Prior to July 14, 1971, at site 1 mi (1.6 km) downstream.

PERIOD OF RECORD.--Monthly discharge January 1934 to current year.

REMARKS.--Record shows waste water from Valley Division returned to Colorado River.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09531900. MAIN OUTLET DRAIN EXTENSION BELOW MORELOS DAM (M.O.D.E. 3).

LOCATION.--Water-stage recorder and Parshall flume in NW¼SE¼ sec.28, T.8 S., R.24 W., Hydrologic Unit 15030108, at outlet to Colorado River just downstream from Morelos Dam.

PERIOD OF RECORD.--Monthly discharge November 1965 to current year.

REMARKS.--Record shows water conveyed to Colorado River below Morelos Dam, from numerous drainage wells in Wellton-Mohawk Irrigation and Drainage District. (See also stas 09529300, 09531800.)

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09532500. ELEVEN MILE WASTEWAY.

LOCATION.--Water-stage recorder and regulating gate in SE¼NW¼ sec.8, T.9 S., R.24 W., Hydrologic Unit 15030108, 3.2 mi (5.1 km) downstream from Morelos Dam.

PERIOD OF RECORD.--Monthly discharge January 1924 to current year.

REMARKS.--Record shows waste water from Valley Division returned to Colorado River.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09533000. TWENTY-ONE MILE WASTEWAY.

LOCATION.--Water-stage recorder and weir in NE¼NW¼ sec.35, T.10 S., R.25 W., Hydrologic Unit 15030108, 0.6 mi (1.0 km) upstream from outlet to Colorado River, which is 2.4 mi (3.9 km) upstream from southerly international boundary and 2.6 mi (4.2 km) northwest of San Luis, Ariz. Prior to May 1, 1971, water-stage recorder and Parshall flume at site 200 ft (60 m) upstream.

PERIOD OF RECORD.--Monthly discharge March 1939 to current year.

REMARKS.--Record shows waste water from Valley Division returned to Colorado River.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09533300. WELLTON-MOHAWK BYPASS DRAIN AT ARIZONA-SONORA BOUNDARY.

LOCATION.--Water-stage recorder and Parshall flume in NW¼NE¼ sec.10, T.11 S., R.25 W., Hydrologic Unit 15030108, on right bank 80 ft (24 m) upstream from the Arizona boundary, 550 ft (168 m) east of the thalweg of Colorado River, and 1.8 mi (2.9 km) west of San Luis, Ariz.

PERIOD OF RECORD.--Monthly discharge June 1977 to current year.

REMARKS.--Record shows water conveyed to the Santa Clara Slough, from numerous drainage wells in Wellton-Mohawk Irrigation and Drainage District. (See also stas 09529300, 09531800, 09531900.)

COOPERATION.--Record furnished by International Boundary and Water Commision (U.S. Section).

09534000. MAIN DRAIN.

LOCATION.--Flowmeters in discharge pipes at pumping plant in SE¼NE¼ sec.11, T.11 S., R.25 W., Hydrologic Unit 15030108, 0.4 mi (0.6 km) west of San Luis, Ariz. Prior to Apr. 1, 1969, rated pumps with forebay and afterbay gages to measure head.

PERIOD OF RECORD.--Monthly discharge January 1919 to current year.

REMARKS.--Record shows flow which consists mostly of drainage water from the Valley Division which is pumped across the Arizona-Sonora boundary for use in Mexico. Flowmeters checked by discharge measurements made by International Boundary and Water Commission (U.S. Section).

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09534300. WEST MAIN CANAL WASTEWAY.

LOCATION.--Water-stage recorder and weir, in NW¼NE¼ sec.11, T.11 S., R.25 W., Hydrologic Unit 15030108, 0.3 mi (0.5 km) upstream from outlet to Main drain, and 0.4 mi (0.6 km) west of San Luis, Ariz. Prior to Aug. 1, 1975, at site 150 ft (46 m) upstream from outlet to Main drain.

PERIOD OF RECORD.--Monthly discharge February 1971 to current year.

REMARKS.--Record shows waste water from Valley Division which is discharged across the Arizona-Sonora boundary for use in Mexico.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

09534500. EAST MAIN CANAL WASTEWAY.

LOCATION.--Water-stage recorder and weir, in NW¼SW¼ sec.12, T.11 S., R.25 W., Hydrologic Unit 15030108, 0.3 mi (0.5 km) upstream from outlet to Main drain, and 0.2 mi (0.3 km) west of San Luis, Ariz.

PERIOD OF RECORD.--Monthly discharge January 1924 to June 1928, January 1932 to December 1933, April 1935 to current year. Calendar year estimates 1934 and 1935, published in WSP 1313.

REMARKS.--Record shows amount of unused water at the extreme end of the Valley Division which is discharged across the Arizona-Sonora boundary for use in Mexico.

COOPERATION.--Record furnished by International Boundary and Water Commission (U.S. Section).

Return surface flows below Imperial Dam, AZ-CA--Continued

MONTHLY RETURN FLOWS, IN ACRE-FEET, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Month	Mittry Lake Outlet Channel 09527900	Laguna Canal wasteway 09528600	Levee Canal wasteway 09528800	North Gila Drain No. 1 09529000	North Gila Drain No. 3 09529050	Fortuna wasteway 09529100
October	472	0	170	282	0	7.3
November	393	0	102	170	0	36
December	500	0	44	169	0	41
CAL YR 1978	6,040	0	1,680	2,740	0	274
January	685	0	53	124	0	44
February	494	0	9.2	80	0	35
March	768	0	88	107	0	42
April	516	0	34	174	0	38
May	389	0	106	235	0	46
June	328	0	85	305	0	48
July	527	0	65	576	0	38
August	731	0	112	623	0	37
September	574	0	138	456	0	45
WTR YR 1979	6,380	0	1,000	3,300	0	457

Month	North Gila Main Canal wasteway 09529150	South Gila Pump Outlet Channel No. 3 09529160	Bruce Church Drain 09529200	South Gila Pump Outlet Channel No. 2 09529240	Bruce Church wasteway 09529250
October	165	2.2	0	1,070	0
November	55	2.0	0	685	7.5
December	23	1,210	0	1,490	0.02
CAL YR 1978	1,140	8,860	14.3	15,760	38
January	13	80	0	889	0.2
February	0	2.1	0	451	1.1
March	0	8.2	0	1,100	14
April	0	401	0	1,820	2.1
May	0	693	21	2,090	9.5
June	0	1,320	94	1,000	2.3
July	0	1,620	77	1,820	3.6
August	0	1,250	57	1,880	0.5
September	0	1,480	20	1,800	0
WTR YR 1979	*257	8,070	269	16,110	41

* Dike placed across wasteway to prevent backwater from Gila River on January 23.

Month	Wellton-Mohawk Main Outlet Drain 09529300	South Gila Pump Outlet Channel No. 1 09529360	South Gila Drain No. 2 09529400	South Gila Terminal wasteway 09529420	South Gila Pump Outlet Channel No. 4 09529440
October	15,150	1,750	28	56	1.5
November	14,350	1,450	8.9	71	2.5
December	13,130	1,860	0	60	705
CAL YR 1978	185,000	25,660	333	614	4,090
January	12,520	1,440	18	36	0.02
February	12,150	721	33	56	1.1
March	14,960	2,250	31	85	651
April	14,650	2,230	30	89	887
May	16,530	2,400	46	[illegible]	661
June	15,240	2,330	53	61	523
July	15,080	2,230	56	52	321
August	15,050	2,070	55	22	362
September	14,360	1,590	54	27	440
WTR YR 1979	173,200	22,320	412	709	4,550

NOTE.--Yearly totals given above have been computed from total cfs-days and may differ slightly from the summation of monthly total acre-feet on occasion.

Return surface flows below Imperial Dam, AZ-CA--Continued

MONTHLY RETURN FLOWS, IN ACRE-FEET, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Month	Reservation Drain No. 7 09529600	Reservation Main Drain No. 6 09529700	Reservation Drain No. 2 09529800	Reservation Drain No. 3 09529900	Reservation Main Drain No. 4 09530000	Yuma Mesa Outlet Drain 09530200
October	84	940	6.1	241	2,840	2,510
November	69	712	9.9	208	2,740	2,570
December	34	616	7.9	191	2,480	2,580
CAL YR 1978	652	10,260	81	2,740	34,040	31,560
January	52	605	6.1	189	2,620	1,210
February	66	597	5.6	167	2,190	0
March	60	714	6.1	188	3,080	1,210
April	73	686	6.0	195	2,910	2,520
May	88	801	6.1	230	3,160	0
June	121	1,010	8.5	266	3,440	1,410
July	153	1,210	12	307	3,850	1,190
August	149	1,270	12	372	3,920	1,680
September	108	1,080	12	359	2,910	2,040
WTR YR 1979	1,060	10,240	98	2,910	36,130	18,920

Month	Reservation Drain No. 11 09530400	Drain 8-B 09530500	M.O.D.E. 2 (above Morelos Dam) 09531800	Cooper wasteway 09531850	M.O.D.E. 3 (below Morelos Dam) 09531900	Eleven Mile wasteway 09532500
October	12	74	0	62	0	12
November	9.1	60	0	75	0	169
December	6.1	42	0	182	0	134
CAL YR 1978	175	774	0	796	1,660	1,120
January	6.1	44	0	73	0	8.5
February	5.6	52	0	64	0	170
March	11	70	0	89	0	173
April	12	76	0	77	0	202
May	14	103	0	54	3.0	10
June	22	121	0	48	0.4	173
July	38	172	0	59	0	15
August	43	270	0	51	0	171
September	31	263	0	93	0	23
WTR YR 1979	210	1,350	0	927	3.4	1,260

Month	Twenty-one Mile wasteway 09533000	Wellton-Mohawk Bypass Drain 09533300	Main Drain 09534000	West Main Canal wasteway 09534300	East Main Canal wasteway 09534500
October	0	14,600	6,350	364	357
November	0	14,040	5,830	300	341
December	0	12,930	5,350	317	346
CAL YR 1978	6.1	180,400	73,190	2,870	3,330
January	0	12,380	5,230	187	311
February	0	12,070	4,870	500	196
March	0	14,470	6,150	363	294
April	0	14,330	6,280	308	258
May	0	16,260	6,680	263	330
June	0	14,710	6,890	273	267
July	0	14,960	7,460	217	249
August	0	15,020	7,410	257	309
September	0	14,730	6,680	379	440
WTR YR 1979	0	170,600	75,180	3,730	3,700

NOTE.--Yearly totals given above have been computed from total cfs-days and may differ slightly from the summation of monthly total acre-feet on occasion.

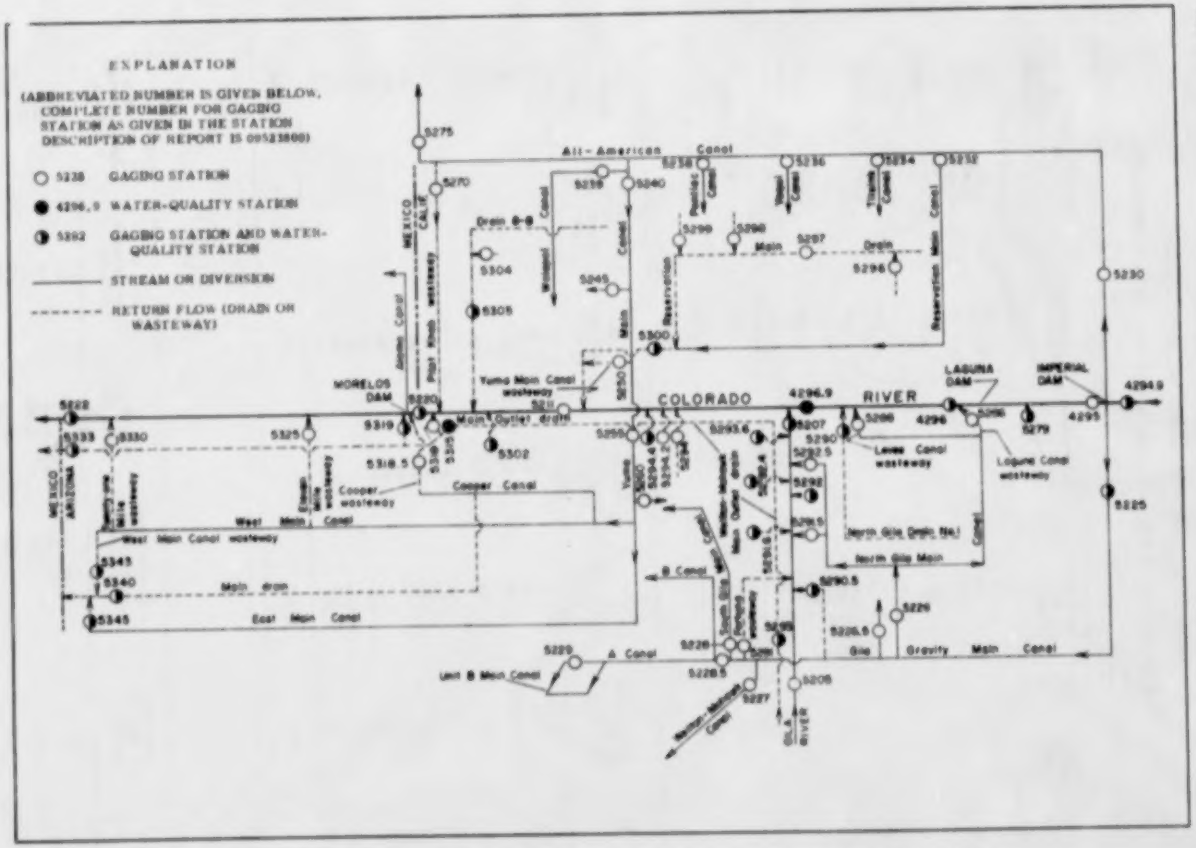

EXPLANATION
(ABBREVIATED NUMBER IS GIVEN BELOW, COMPLETE NUMBER FOR GAGING STATION AS GIVEN IN THE STATION DESCRIPTION OF REPORT IS 09523000)
○ 5228 GAGING STATION
● 4296.9 WATER-QUALITY STATION
◐ 5292 GAGING STATION AND WATER-QUALITY STATION
STREAM OR DIVERSION
RETURN FLOW (DRAIN OR WASTEWAY)
All-American Canal
COLORADO RIVER
MEXICO
CALIF
ARIZONA
MORELOS DAM
LAGUNA DAM
IMPERIAL DAM
GILA RIVER
Pilot Knob wasteway
Yuma Main Canal wasteway
Main Outlet drain
Drain 8-B
Reservation Main Canal
Main Drain
Cooper Canal
Cooper wasteway
West Main Canal
West Main Canal wasteway
Main drain
East Main Canal
Unit B Main Canal
A Canal
B Canal
Gila Gravity Main Canal
North Gila Main Canal
North Gila Drain No.1
Levee Canal wasteway
Laguna Canal wasteway
Yuma
5275
5270
5238
5236
5234
5232
5239
5240
5299
5298
5297
5296
5304
5305
5245
5300
5250
5211
5230
5222
5333
5330
5325
5319
5320
5318.5
5315
5302
5255
5294.4
5294.2
5293.6
5207
4296.9
5290
5288
4296
5286
5279
4295
4294.9
5292.5
5292
5290.5
5226.5
5226
5225
5229
5228
5228.5
5227
5205
5345
5340
5343

FIGURE 4.--SCHEMATIC DIAGRAM SHOWING GAGING STATIONS AND WATER-QUALITY STATIONS ON STREAMS, DIVERSIONS, AND RETURN FLOWS BETWEEN IMPERIAL DAM AND THE SOUTHERLY INTERNATIONAL BOUNDARY.

10250800 DARWIN CREEK NEAR DARWIN, CA

LOCATION.--Lat 36°19'14", long 117°31'23", in NW¼SE¼SW¼ sec.34, T.18 S., R.41 E., Inyo County, Hydrologic Unit 18090204, on left bank 510 ft (155 m) downstream from Darwin Falls, 1.6 mi (2.6 km) upstream from unnamed tributary, and 5.2 mi (8.4 km) northeast of Darwin.

DRAINAGE AREA.--173 mi^2 (448 km^2).

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,640 ft (805 m), from topographic map. Prior to Aug. 6, 1970, at site 190 ft (58 m) downstream at same datum.

REMARKS.--Records good. No regulation above station. Town of Darwin pumps water above station for municipal supply.

AVERAGE DISCHARGE.--17 years, 0.42 ft^3/s (0.012 m^3/s), 304 acre-ft/yr (375,000 m^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,400 ft^3/s (125 m^3/s) Jan. 25, 1969, gage height, 8.40 ft (2.560 m), at site then in use, from floodmarks, on basis of slope-conveyance study of maximum flow; minimum daily, 0.05 ft^3/s (0.001 m^3/s) Aug. 30 to Sept. 4, 1969.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 20.42 ft (6.224 m), present site, from floodmarks, date and discharge unknown.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.1 ft^3/s (0.031 m^3/s) Jan. 23, gage height, 3.65 ft (1.113 m), no peak above base of 10 ft^3/s (0.28 m^3/s); minimum daily, 0.01 ft^3/s (<0.001 m^3/s) Aug. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	.27	.55	.20	.64	.09	.21	.35	.10	.06	.05	.24
2	.19	.27	.47	.20	.64	.09	.21	.24	.10	.06	.06	.24
3	.19	.27	.35	.20	.31	.09	.18	.31	.12	.05	.06	.21
4	.19	.27	.35	.24	.16	.08	.18	.47	.12	.05	.04	.21
5	.19	.27	.33	.25	.18	.08	.16	.35	.14	.05	.01	.18
6	.19	.27	.31	.25	.14	.08	.18	.27	.14	.05	.02	.14
7	.19	.27	.30	.24	.14	.08	.18	.24	.16	.05	.02	.12
8	.19	.27	.28	.22	.14	.08	.16	.27	.12	.05	.03	.14
9	.19	.27	.26	.20	.18	.08	.18	.27	.14	.05	.03	.14
10	.19	.27	.26	.19	.21	.08	.16	.27	.14	.04	.04	.14
11	.19	.31	.25	.18	.27	.09	.16	.24	.16	.04	.06	.08
12	.19	.35	.24	.18	.27	.10	.16	.21	.16	.04	.10	.08
13	.19	.35	.24	.18	.16	.11	.16	.21	.16	.04	.10	.10
14	.19	.31	.23	.18	.08	.11	.21	.21	.18	.03	.10	.07
15	.19	.27	.22	.18	.08	.11	.18	.24	.21	.03	.10	.06
16	.19	.27	.27	.21	.12	.11	.24	.24	.10	.03	.10	.08
17	.19	.31	.34	.27	.12	.11	.21	.24	.12	.03	.12	.08
18	.19	.35	.44	.31	.12	.11	.24	.21	.10	.04	.12	.16
19	.19	.35	.52	.35	.10	.15	.21	.24	.10	.06	.10	.18
20	.19	.35	.48	.24	.12	.20	.20	.24	.07	.10	.12	.16
21	.19	.40	.42	.27	.14	.25	.14	.31	.07	.12	.12	.16
22	.19	.47	.37	.40	.14	.31	.18	.27	.07	.10	.16	.16
23	.19	.47	.32	.91	.14	.27	.21	.31	.07	.12	.12	.16
24	.19	.55	.28	.64	.08	.31	.27	.31	.07	.14	.14	.18
25	.19	.55	.24	.64	.10	.31	.35	.27	.06	.16	.12	.18
26	.21	.55	.20	.55	.10	.40	.40	.31	.06	.20	.16	.18
27	.24	.55	.20	.55	.10	.40	.47	.31	.06	.18	.14	.21
28	.24	.64	.20	.55	.10	.40	.40	.40	.06	.02	.16	.14
29	.27	.64	.20	.47	---	.35	.35	.31	.06	.04	.16	.14
30	.27	.64	.20	.47	---	.27	.55	.35	.06	.03	.24	.16
31	.27	---	.20	.27	---	.27	---	.21	---	.05	.24	---
TOTAL	6.25	11.38	9.52	10.19	5.08	5.57	7.09	8.68	3.28	2.11	3.14	4.48
MEAN	.20	.38	.31	.33	.18	.18	.24	.28	.11	.068	.10	.15
MAX	.27	.64	.55	.91	.64	.40	.55	.47	.21	.20	.24	.24
MIN	.19	.27	.20	.18	.08	.08	.14	.21	.06	.02	.01	.06
AC-FT	12	23	19	20	10	11	14	17	6.5	4.2	6.2	8.9

CAL YR 1978 TOTAL 171.28 MEAN .47 MAX 34 MIN .08 AC-FT 340
WTR YR 1979 TOTAL 76.77 MEAN .21 MAX .91 MIN .01 AC-FT 152

10251100 SALT CREEK NEAR STOVEPIPE WELLS, CA

LOCATION.--Lat 36°35'58", long 117°00'46", in NE¼ sec.6, T.16 S., R.46 E., Inyo County, Hydrologic Unit 18090203, Death Valley National Monument, on left bank 3.0 mi (4.8 km) southeast of intersection of State Highway 190 and Stovepipe Wells Road, and 7.4 mi (11.9 km) east of Stovepipe Wells Hotel.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--February 1974 to current year.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is -180 ft (-55 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 0.344 ft^3/s (0.010 m^3/s), 246 acre-ft/yr (303,000 m^3/s).

REMARKS.--Records good. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 363 ft^3/s (10.3 m^3/s) Feb. 9, 1976, gage height, 4.81 ft (1.466 m) based on slope-conveyance measurement of peak flow, minimum daily, 0.05 ft^3/s (0.001 m^3/s) July 14, 19, Aug. 4-6, 8, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6.2 ft^3/s (0.176 m^3/s) Jan. 18, (1800 hrs), gage height, 2.99 ft (0.911 m), no other peak above base of 5.0 ft^3/s (0.14 m^3/s); minimum daily, 0.05 ft^3/s (0.001 m^3/s) July 14, 19, Aug. 4-6, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.15	.19	.32	1.2	.50	.46	.22	.09	.06	.08	.06
2	.12	.15	.19	.33	.73	.49	.44	.23	.09	.07	.06	.06
3	.12	.14	.18	.35	.61	.50	.42	.23	.09	.07	.06	.07
4	.12	.14	.20	.34	.58	.52	.44	.20	.09	.07	.05	.07
5	.12	.15	.21	.39	.56	.52	.43	.18	.09	.07	.05	.07
6	.12	.15	.20	.39	.56	.52	.39	.18	.08	.07	.05	.07
7	.12	.15	.21	.37	.56	.53	.38	.18	.08	.07	.06	.07
8	.12	.15	.21	.39	.55	.53	.39	.19	.09	.07	.05	.06
9	.13	.15	.22	.40	.55	.52	.40	.19	.09	.07	.06	.06
10	.13	.16	.23	.37	.55	.47	.34	.19	.09	.07	.06	.07
11	.13	.16	.24	.39	.56	.48	.31	.19	.09	.07	.08	.06
12	.12	.16	.25	.39	.57	.49	.32	.19	.09	.07	.09	.06
13	.11	.17	.25	.37	.57	.48	.35	.18	.08	.06	.08	.07
14	.12	.16	.26	.39	.54	.50	.36	.17	.07	.05	.07	.06
15	.13	.16	.26	.42	.50	.52	.36	.16	.07	.06	.07	.06
16	.13	.17	.27	.46	.53	.49	.35	.15	.07	.06	.06	.07
17	.13	.17	.29	.61	.52	.48	.34	.15	.07	.06	.08	.08
18	.13	.17	.28	1.8	.55	.49	.34	.14	.08	.06	.09	.08
19	.13	.17	.28	.79	.54	.66	.33	.12	.09	.05	.08	.07
20	.14	.17	.27	.55	.54	.65	.33	.11	.09	.09	.07	.07
21	.14	.17	.28	.53	.55	.61	.32	.11	.09	.09	.07	.08
22	.12	.17	.30	.51	.50	.54	.28	.11	.09	.08	.08	.08
23	.12	.18	.30	.47	.51	.52	.26	.11	.08	.07	.08	.07
24	.12	.18	.30	.48	.50	.52	.28	.11	.08	.07	.08	.09
25	.13	.18	.31	.47	.53	.51	.28	.10	.08	.07	.08	.08
26	.13	.18	.31	.43	.54	.48	.28	.10	.08	.07	.08	.08
27	.14	.18	.32	.43	.50	.45	.26	.09	.08	.06	.08	.09
28	.14	.18	.32	.46	.52	.52	.25	.09	.07	.06	.07	.09
29	.14	.18	.32	.43	---	.49	.24	.10	.07	.06	.07	.08
30	.16	.18	.32	.45	---	.48	.23	.10	.06	.06	.07	.09
31	.23	---	.32	1.3	---	.46	---	.10	---	.06	.06	---
TOTAL	4.06	4.93	8.09	15.78	16.02	15.92	10.16	4.67	2.46	2.07	2.15	2.17
MEAN	.13	.16	.26	.51	.57	.51	.34	.15	.082	.067	.069	.072
MAX	.23	.18	.32	1.8	1.2	.66	.46	.23	.09	.09	.09	.09
MIN	.11	.14	.18	.32	.50	.45	.23	.09	.06	.05	.05	.06
AC-FT	8.1	9.8	16	31	32	32	20	9.3	4.9	4.1	4.3	4.3

CAL YR 1978 TOTAL 101.73 MEAN .28 MAX 10 MIN .07 AC-FT 202
WTR YR 1979 TOTAL 88.48 MEAN .24 MAX 1.8 MIN .05 AC-FT 176

10251300 AMARGOSA RIVER AT TECOPA, CA

LOCATION.--Lat 35°50'53", long 116°13'43", in NW¼NW¼SE¼ sec.9, T.20 N., R.7 E., Inyo County, Hydrologic Unit 18090202, on right bank 20 ft (6 m) upstream from county road, and 0.2 mi (0.3 km) west of Tecopa.

DRAINAGE AREA.--3,090 mi² (8,000 km²), approximately, much of which is non-contributing.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder and culvert control. Altitude of gage is 1,310 ft (399 m), from topographic map.

REMARKS.--Records poor. No regulation. City of Tecopa pumps water for municipal use upstream.

AVERAGE DISCHARGE.--18 years, 3.29 ft³/s (0.093 m³/s), 2,380 acre-ft/yr (2.93 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,000 ft³/s (142 m³/s), estimated, Feb. 26, 1969, gage height, 18.34 ft (5.590 m), from floodmark; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 54 ft³/s (1.53 m³/s) Mar. 21 (0915 hrs), gage height, 4.81 ft (1.466 m), no other peak above base of 50 ft³/s (1.42 m³/s), from rating curve extended above 32 ft³/s (0.91 m³/s) on basis of slope-area measurement at gage height 13.9 ft (4.24 m); no flow many days during year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.24	.37	1.7	4.0	1.8	.25	.01			
2		0	1.4	.27	1.4	2.1	1.4	.35	0			
3		0	.54	.40	1.4	.96	1.3	.54	.01			
4		0	.24	.54	.86	.65	.98	.49	.01			
5		0	.30	.78	.87	.54	.93	.31	0			
6		0	.25	.90	.58	.43	.82	.17	0			
7		0	.08	.91	.48	.44	.46	.18	0			
8		0	.07	.90	.45	.42	.73	.38	0			
9		0	.11	.93	.48	.40	.85	.54	0			
10		0	.18	1.1	.55	.31	1.4	.41	0			
11		0	.25	.85	.58	.26	.40	.35	0			
12		0	.27	.75	.61	.25	.59	.35	0			
13		0	.34	.70	.60	.26	.62	.30	0			
14		.51	.35	.65	.52	.32	.61	.25	0			
15		.15	.39	.85	.44	.35	.56	.20	0			
16		.02	.40	16	.54	.15	.70	.14	0			
17		.01	1.0	14	.51	.19	.80	.15	0			
18		.01	1.6	6.6	.53	.41	.85	.17	0			
19		.01	1.1	4.6	.40	2.8	.80	.11	0			
20		.02	1.1	1.7	.47	4.2	.75	.09	0			
21		.03	.63	1.1	1.1	22	.74	.09	0			
22		.09	.53	1.1	.75	9.9	.52	.08	0			
23		.12	.57	.91	.58	5.5	.29	.06	0			
24		.18	.58	.84	.58	3.4	.27	.05	0			
25		.51	.63	.83	.59	2.6	.41	.04	0			
26		.31	.66	1.3	.63	1.8	.44	.03	0			
27		.41	.71	.65	.64	2.0	.30	.02	0			
28		.21	.75	.74	.45	3.0	.36	.01	0			
29		.12	.72	.39	---	2.8	.44	.01	0			
30		.11	.72	.47	---	2.3	.37	.01	0			
31		---	.56	1.0	---	2.2	---	.01	---			---
TOTAL	0	2.82	17.27	63.13	19.29	76.94	21.49	6.14	.03	0	0	0
MEAN	0	.094	.56	2.04	.69	2.48	.72	.20	.001	0	0	0
MAX	0	.51	1.6	16	1.7	22	1.8	.54	.01	0	0	0
MIN	0	0	.07	.27	.40	.15	.27	.01	0	0	0	0
AC-FT	0	5.6	34	125	38	153	43	12	.06	0	0	0

CAL YR 1978 TOTAL 2898.27 MEAN 7.94 MAX 196 MIN 0 AC-FT 5750
WTR YR 1979 TOTAL 207.11 MEAN .57 MAX 22 MIN 0 AC-FT 411

10252550 CARUTHERS CREEK NEAR IVANPAH, CA

LOCATION.--Lat 35°14'33", long 115°17'58", in NW¼NW¼NE¼ sec.6, T.13 N., R.16 E., San Bernardino County, Hydrologic Unit 15030102, on left bank 6.6 mi (10.6 km) south of Ivanpah.

DRAINAGE AREA.--1.13 mi² (2.93 km²).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,640 ft (1,719 m), from topographic map.

REMARKS.--Records fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--16 years, 0.106 ft³/s (0.003 m³/s), 77 acre-ft/yr (94,900 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 583 ft³/s (16.5 m³/s) Oct. 1, 1976, gage height, 4.95 ft (1.509 m), on basis of slope-conveyance measurement of 518 ft³/s (14.7 m³/s); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10 ft³/s (0.283 m³/s) and maximum (*), from rating curve extended above 1.0 ft³/s (0.003 m³/s) on basis of slope-area measurement at gage height 3.34 ft (1.018 m):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 23	0130	12	0.34	1.72	0.524	Aug. 12	Unknown	*333	9.43	5.75	1.753
July 20	1130	21	0.59	2.00	0.610						

Minimum daily discharge, no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.03	0	.15	.03	.17			0	0	
2		0	.10	0	.28	.08	.15			0	0	
3		0	.08	0	.34	.05	.15			0	0	
4		0	.05	0	.37	.03	.12			0	0	
5		0	.15	0	.34	0	.10			0	0	
6		0	.10	0	.34	0	.10			0	0	
7		0	.10	0	.31	0	.10			0	0	
8		0	.10	0	.26	0	.08			0	0	
9		0	.10	.02	.17	0	.08			0	0	
10		0	.05	0	.10	0	.08			0	0	
11		0	0	0	.08	.01	.08			0	0	
12		0	0	0	.05	.02	.08			0	80	
13		0	0	.02	0	.03	.10			0	.59	
14		0	0	0	0	.15	.10			0	.05	
15		0	0	0	.11	.28	.08			0	0	
16		0	0	.03	.05	.34	.08			0	.12	
17		0	2.0	.17	.05	2.2	.06			0	.60	
18		0	2.6	.15	0	2.8	.05			0	1.4	
19		0	.59	.10	0	2.2	.04			0	.70	
20		0	.28	.08	0	1.2	.02			4.1	.10	
21		0	.23	.08	0	.78	0			.37	.02	
22		0	.17	.08	0	1.7	0			.10	0	
23		0	.15	.05	0	5.0	0			.02	0	
24		0	.08	.03	.03	1.5	0			0	0	
25		.14	.05	.10	.03	1.1	0			0	0	
26		.03	.03	.12	0	.65	0			0	0	
27		0	.02	.10	0	.37	0			0	0	
28		0	0	.10	0	.31	0			0	0	
29		0	0	.10	---	.26	0			0	0	
30		.05	0	.10	---	.20	0			0	0	
31		---	0	.10	---	.17	---		---	0	0	---
TOTAL	0	.22	7.06	1.53	3.06	21.46	1.82	0	0	4.59	83.58	0
MEAN	0	.007	.23	.049	.11	.69	.061	0	0	.15	2.70	0
MAX	0	.14	2.6	.17	.37	5.0	.17	0	0	4.1	80	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	.4	14	3.0	6.1	43	3.6	0	0	9.1	166	0

CAL YR 1978 TOTAL 63.52 MEAN .17 MAX 17 MIN 0 AC-FT 126
WTR YR 1979 TOTAL 123.32 MEAN .34 MAX 80 MIN 0 AC-FT 245

10254005 SALTON SEA NEAR WESTMORLAND, CA

LOCATION.--Lat 33°11'37", long 115°49'54", in NE¼SE¼SW¼ sec.21, T.11 S., R.11 E., Imperial County, Hydrologic Unit 18100200, on western shore at Sandy Beach, and 15.5 mi (24.9 km) northwest of Westmorland.

DRAINAGE AREA.--8,360 mi² (21,650 km²), approximately.

PERIOD OF RECORD.--November 1904 to current year. Records prior to 1932 are published in WSP 735.

GAGE.--Water-stage recorder. Datum of gage is 250.00 ft (76.200 m) below National Geodetic Vertical Datum of 1929; gage readings have been converted to elevations below NGVD. See WSP 1734 for history of changes prior to Mar. 2, 1956.

REMARKS.--Bottom of sea is 277.7 ft (84.64 m) below NGVD. See WSP 300, 735, and 918 for condensed history of Salton Sea.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 195.9 ft (59.71 m) below NGVD, in February and March 1907; minimum since 1906, 251.6 ft (76.69 m) below NGVD in November 1924.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 227.9 ft (69.46 m) below NGVD, June 5-7; minimum, 229.4 ft (69.92 m) below NGVD some days in November.

MEAN DAILY MONTHEND ELEVATIONS, IN FEET, BELOW NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Date	Elevation (feet)
Sept. 30	229.4	Apr. 30	228.1
Oct. 31	229.3	May 31	228.0
Nov. 30	229.3	June 30	228.2
Dec. 31	229.1	July 31	228.2
Jan. 31	228.9	Aug. 31	228.3
Feb. 28	228.6	Sept. 30	228.4
Mar. 31	228.3		

INFLOW TO SALTON SEA

Salton Sea, located near the northeast corner of Imperial County, is a closed basin consisting of approximately 8,360 mi² (21,650 km²).

The following table shows monthly and annual inflow, in acre-feet, for the water year October 1978 to September 1979 and the calendar year January to December 1978. Inflow from Imperial Valley is the sum of flows in Alamo River (station 10254730), New River (station 10255550), drains and wasteways as furnished by Imperial Irrigation District, and since October 1967 San Felipe Creek (station 10255885). Since October 1967 inflow from Coachella Valley is the sum of flows in Whitewater River (station 10259540), Salt Creek (station 10254050), Wasteway No. 1 (station 10259920), and other drains as furnished by Coachella Valley County Water District. Table also shows amount of flow in Alamo and New Rivers contributed by Mexico as furnished by Imperial Irrigation District. Ungaged drains and natural runoff also contribute inflow to the sea.

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
Inflow from												
Imperial Valley	99309	79723	78437	68094	78463	106716	131089	120362	99013	115815	108903	108950
Coachella Valley	11684	10757	11387	12304	13600	17068	14375	12678	12053	17576	15904	12622

Total cal yr 1978 1,248,044 ac-ft
Total wtr yr 1979 1,356,982 ac-ft

FLOW FROM MEXICO AT INTERNATIONAL BOUNDARY

Alamo River	99	99	108	125	112	165	151	132	107	107	165	85
New River	7892	7414	9301	10509	8819	10618	10616	11369	17026	22576	12655	9949

Cal yr 1978: Alamo River 1,296 ac-ft Wtr yr 1979: 1,455 ac-ft
Cal yr 1978: New River 98,408 ac-ft Wtr yr 1979: 138,744 ac-ft

10254050 SALT CREEK NEAR MECCA, CA

LOCATION.--Lat 33°26'49", long 115°50'33", in NE¼SE¼SW¼ sec.28, T.8 S., R.11 E., Riverside County, Hydrologic Unit 18100200, on pier of Southern Pacific Railroad bridge, 0.3 mi (0.5 km) upstream from mouth, and 16 mi (26 km) southeast of Mecca.

DRAINAGE AREA.--269 mi² (697 km²).

PERIOD OF RECORD.--January 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is -230 ft (-70.1 m), from topographic map.

REMARKS.--Records poor. No regulation or diversion above station. Flow sustained by irrigation seepage.

AVERAGE DISCHARGE.--18 years, 6.66 ft³/s (0.189 m³/s), 4,830 acre-ft/yr (5.96 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,900 ft³/s (280 m³/s) Sept. 24, 1976, gage height, 14.3 ft (4.36 m), from rating curve extended above 20 ft³/s (0.57 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 0.06 ft³/s (0.002 m³/s) Nov. 1, 4, 5, 9, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 548 ft³/s (15.5 m³/s) Oct. 20, gage height, 8.15 ft (2.484 m), from rating curve extended as explained above; minimum daily, 0.06 ft³/s (0.002 m³/s) Nov. 1, 4, 5, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.63	.06	.35	1.1	111	9.1	5.0	12	2.3	.47	.78	.54
2	.72	.07	.48	.80	117	9.8	4.1	4.5	2.4	.44	.78	.54
3	.72	.07	.25	2.9	65	7.7	4.5	3.0	2.2	.43	.78	.54
4	.72	.06	.23	1.3	32	7.7	3.6	2.8	2.1	.43	.70	.63
5	.63	.06	.27	1.3	14	7.7	4.5	2.8	2.0	.42	.86	.63
6	.54	.07	.35	5.3	18	7.6	4.5	2.8	2.0	.41	.94	.81
7	.54	.08	.25	9.3	35	7.2	3.6	2.6	2.0	.38	1.0	.92
8	.63	.07	.25	2.6	22	7.6	4.1	2.4	1.9	.36	.94	1.0
9	.63	.06	.27	1.8	11	7.7	4.1	2.6	1.9	.32	.86	1.0
10	.54	.08	.52	1.8	11	7.2	4.1	2.6	1.8	.30	.86	.92
11	.54	.08	.63	1.6	11	6.3	3.6	2.6	1.7	.28	.86	.92
12	.54	.07	.63	1.6	9.8	6.3	4.1	2.2	1.4	.27	35	.92
13	.46	.29	.63	1.6	9.8	6.3	4.5	2.2	1.2	.25	45	1.2
14	.46	.52	.63	1.1	9.8	6.3	4.5	1.7	1.0	.24	7.3	1.3
15	.46	.21	.69	1.4	7.7	5.8	4.5	1.7	.95	.25	8.3	1.3
16	.46	.14	.75	74	7.6	5.8	4.1	1.7	.86	.26	24	1.2
17	.54	.16	3.2	63	7.6	5.8	7.6	1.9	.98	.26	29	1.3
18	.54	.16	11	38	7.6	5.8	35	1.9	1.0	.25	5.6	1.4
19	.63	.16	5.0	36	7.6	22	7.6	1.9	1.1	5.0	.92	1.8
20	27	.21	5.3	23	9.1	72	5.0	2.8	1.0	15	1.6	1.8
21	184	1.6	1.8	15	12	65	4.5	3.6	.94	12	5.6	1.8
22	5.5	.58	1.1	13	9.1	76	4.1	3.0	.90	10	.63	1.8
23	.21	.23	1.1	11	7.6	46	4.1	2.6	.83	7.0	.39	2.1
24	.12	14	1.8	11	7.6	13	3.6	2.2	.78	4.0	.39	2.1
25	.35	18	1.1	12	7.2	9.8	3.6	6.7	.70	1.8	.39	2.3
26	.19	.86	1.1	16	17	5.8	3.2	3.2	.64	.78	.33	2.6
27	.18	.58	1.3	22	26	5.8	3.0	2.6	.60	.78	.39	2.6
28	.08	.52	2.3	11	9.1	7.7	2.8	2.2	.54	.78	.39	2.6
29	.07	.29	4.1	12	---	13	2.8	2.6	.52	.70	.54	3.3
30	.07	.27	1.8	20	---	6.3	4.5	2.2	.48	.70	.54	3.6
31	.07	---	1.1	46	---	5.8	---	2.4	---	.70	.46	---
TOTAL	228.69	31.61	49.40	450.50	619.2	475.1	158.8	92.0	38.64	64.30	176.13	45.47
MEAN	7.38	1.05	1.59	14.5	22.1	15.3	5.29	2.97	1.29	2.07	5.68	1.52
MAX	184	14	11	74	117	76	35	12	2.4	15	45	3.6
MIN	.07	.06	.23	.80	7.2	5.0	2.8	1.7	.48	.24	.33	.54
AC-FT	454	63	98	894	1230	942	315	182	77	128	349	90

CAL YR 1978 TOTAL 1929.95 MEAN 5.29 MAX 184 MIN .06 AC-FT 3830
WTR YR 1979 TOTAL 2429.84 MEAN 6.66 MAX 184 MIN .06 AC-FT 4820

10254670 ALAMO RIVER AT DROP NO. 3, NEAR CALIPATRIA, CA

WATER-QUALITY RECORDS

LOCATION.--Lat 33°06'13", long 115°32'38", on line between secs. 19 and 20, T.12 S., R.14 E., Imperial County, Hydrologic Unit 18100200, at gaging station 2.2 mi (3.5 km) southwest of Calipatria.

PERIOD OF RECORD.--
CHEMICAL ANALYSES: August 1969 to June 1970, August 1975 to September 1977, October 1978 to current year.
BIOLOGICAL DATA: August 1979 to September 1979.

REMARKS.--Data for the 1975 and 1976 water years are published with 1977 water year.

COOPERATION.--Discharges were furnished by Imperial Irrigation District.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JUL 18...	1140	843	3500	7.8	31.0	250	9.4	K80000	2000	870	680	190
AUG 14...	1115	820	4050	7.6	28.5	220	7.6	240000	3300	840	640	190
SEP 12...	1230	915	4010	7.9	30.5	130	7.6	K30000	4700	910	710	200

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
JUL 18...	95	510	56	7.5	13	190	860	600	.6	12	2500
AUG 14...	88	720	76	11	14	200	1100	730	.6	12	2790
SEP 12...	100	550	56	7.9	13	200	1100	620	.6	13	2740

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
JUL 18...	2400	7.0	--	.78	2.5	3.3	1.1	2.2	10	.71	.29
AUG 14...	2970	8.2	--	.22	1.8	2.0	.90	1.1	10	.79	.19
SEP 12...	2740	5.7	5.8	.39	1.1	1.5	.30	1.2	7.2	.40	.07

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
JUL 18...	1140	12	8	200	100	100	1	0	1	10

K Results based on colony count outside the acceptable range (non-ideal colony count).

10254670 ALAMO RIVER AT DROP NO. 3, NEAR CALIPATRIA, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)
JUL										
18...	10	0	3	3	0	19	14	5	7600	7600

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
JUL										
18...	20	9	7	2	340	320	20	.1	.0	.1

DATE	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
JUL									
18...	9	0	10	0	0	0	50	30	20

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
JUL				
18...	1140	19	17	.2
AUG				
14...	1115	16	--	--
SEP				
12...	1230	12	--	--

10254670 ALAMO RIVER AT DROP NO. 3, NEAR CALIPATRIA, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 to SEPTEMBER 1979

PHYTOPLANKTON

DATE	AUG 14,79	SEP 12,79
TIME	1115	1230
TOTAL CELLS/ML	1300	13000
DIVERSITY: DIVISION	0.1	0.1
.CLASS	0.1	0.1
..ORDER	1.0	1.1
...FAMILY	1.0	1.8
....GENUS	1.0	2.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHRYSOPHYTA				
.BACILLARIOPHYCEAE				
..CENTRALES				
...COSCINODISCACEAE				
....CYCLOTELLA	13	1	72	1
..PENNALES				
...NITZSCHIACEAE				
....NITZSCHIA	--	-	140	1
CYANOPHYTA (BLUE-GREEN ALGAE)				
.CYANOPHYCEAE				
..CHROOCOCCALES				
...CHROOCOCCACEAE				
....AGMENELLUM	--	-	570	4
....ANACYSTIS	490#	38	5700#	43
..HORMOGONALES				
...NOSTOCACEAE				
....APHANIZOMENON	--	-	1200	9
...OSCILLATORIACEAE				
....OSCILLATORIA	770#	61	4300#	33
...RIVULARIACEAE				
....RAPHIDIOPSIS	--	-	1200	9

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JUL 18...	1140	843	31.0	332	98
AUG 14...	1115	820	28.5	1420	78
SEP 12...	1230	915	30.5	865	93

10254730 ALAMO RIVER NEAR NILAND, CA

LOCATION.--Lat 33°12'03", long 115°36'07", in NE¼SW¼NE¼ sec. 22, T.11 S., R.13 E., Imperial County, Hydrologic Unit 18100200, on left bank 0.6 mi (1.0 km) upstream from mouth, and 5.8 mi (9.3 km) southwest of Niland.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1943 to current year. Monthly discharge only for January 1943 to September 1960, published in WSP 1734.

GAGE.--Water-stage recorder. Altitude of gage is -235 ft (-72 m), from topographic map.

REMARKS.--Records good. Discharge represents seepage and return flow from irrigated areas.

COOPERATION.--Records furnished by Imperial Irrigation District and reviewed by the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,500 ft^3/s (127 m^3/s) Aug. 17, 1977, estimated by Imperial Irrigation District, minimum daily, 288 ft^3/s (8.16 m^3/s) Jan. 2, 1966.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1010	581	730	528	677	794	1160	1130	847	901	858	1000
2	944	719	687	465	645	858	1140	1190	890	815	890	983
3	933	709	677	444	677	901	1100	1170	890	762	911	907
4	901	719	634	581	624	858	1160	1190	837	858	944	941
5	954	762	634	656	624	826	1130	1200	826	837	901	941
6	986	815	719	794	497	869	1150	1230	794	847	965	949
7	954	847	613	698	539	954	1200	1260	847	837	933	1030
8	1020	815	645	528	613	944	1200	1210	794	805	922	1030
9	986	772	687	454	624	911	1370	1200	762	837	901	1060
10	954	826	677	454	656	890	1320	1130	751	837	901	1040
11	976	805	687	507	730	922	1240	1080	805	794	911	975
12	922	740	783	550	772	858	1240	1100	783	751	1170	1040
13	901	666	762	497	740	858	1270	1010	772	805	1310	1070
14	911	762	826	518	805	879	1280	997	847	847	1010	1030
15	869	730	847	497	815	997	1260	1040	837	869	696	992
16	847	719	890	592	826	1040	1280	1050	890	869	677	975
17	837	740	1290	911	815	1040	1350	1070	922	858	976	941
18	869	794	1440	677	783	1090	1260	1020	826	901	933	967
19	837	794	666	497	730	1100	1220	1050	762	965	751	1050
20	901	736	454	433	783	1340	1240	1150	730	1280	709	1050
21	1750	794	433	412	826	1240	1230	1180	826	1240	726	1050
22	1240	613	475	412	879	783	1210	1120	772	954	704	1050
23	687	433	539	422	826	592	1210	1130	879	805	733	1040
24	847	794	613	475	837	634	1220	1120	901	751	817	1020
25	719	783	507	592	837	772	1280	1090	783	666	899	1030
26	613	645	433	618	879	826	1340	1090	783	719	915	1060
27	687	613	422	454	869	847	1220	986	847	751	949	1120
28	666	550	581	560	826	954	1160	901	890	944	958	1160
29	666	497	603	497	---	1010	1150	847	826	922	1000	1160
30	645	613	550	539	---	997	1160	837	901	911	1000	1080
31	613	---	613	624	---	1080	---	879	---	869	992	---
TOTAL	27645	21386	21117	16786	20754	28664	36750	33657	24820	26807	27962	30741
MEAN	892	713	681	541	741	925	1225	1086	827	865	902	1025
MAX	1750	847	1440	911	879	1340	1370	1260	922	1280	1310	1160
MIN	613	433	422	412	497	592	1100	837	730	666	677	907
AC-FT	54830	42420	41890	33300	41170	56860	72890	66760	49230	53170	55460	60970

CAL YR 1978 TOTAL 304132 MEAN 833 MAX 1750 MIN 307 AC-FT 603200
WTR YR 1979 TOTAL 317089 MEAN 869 MAX 1750 MIN 412 AC-FT 628900

10254730 ALAMO RIVER NEAR NILAND, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: October 1963 to September 1964, water year 1967 (partial-record station), August 1969 to June 1971, August 1975 to current year.
BIOLOGICAL DATA: October 1978 to September 1979.

COOPERATION.--Discharges were furnished by Imperial Irrigation District.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
NOV 28...	1040	599	4700	8.1	14.0	--	--	1100	880	200
MAR 26...	1540	--	3750	8.0	20.0	7.9	38	--	--	--
28...	1130	896	4080	7.8	20.0	--	--	980	780	210
MAY 30...	1145	841	3920	8.0	23.0	7.3	42	1000	830	220
JUL 18...	0935	880	3500	7.8	31.0	--	--	850	650	190

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	SODIUM+ POTAS-SIUM DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
NOV 28...	150	760	59	9.9	--	17	240	1100	950	.6
MAR 26...	--	--	--	--	--	--	--	--	--	--
28...	110	540	54	7.5	--	13	200	960	730	.6
MAY 30...	120	620	56	8.4	640	15	210	1000	780	.6
JUL 18...	90	500	56	7.5	520	15	200	860	600	.6

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
NOV 28...	12	--	10	.32	.41	1.4	1.7	--	.12	.11
MAR 26...	--	--	--	--	--	--	--	--	--	--
28...	9.0	2730	7.7	--	--	--	2.1	9.8	.33	.30
MAY 30...	10	2900	.94	.59	.76	1.5	2.1	3.0	.53	.35
JUL 18...	12	2420	7.6	.57	.73	1.2	1.8	9.4	1.20	1.0

DATE	TIME	ANTI-MONY, TOTAL (UG/L AS SB)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)
NOV 28...	1040	--	3	--	100	920	0	--	--	20
MAR 26...	1540	0	--	100	--	--	--	0	15	--
28...	1130	--	--	--	--	680	--	--	--	--
MAY 30...	1145	3	--	200	--	780	--	7	23	--
JUL 18...	0935	--	--	--	--	640	--	--	--	--

10254730 ALAMO RIVER NEAR NILAND, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV									
28...	30	6	240	40	--	--	100	4400	20
MAR									
26...	--	--	--	--	.0	9	--	--	--
28...	20	--	--	--	--	--	--	--	--
MAY									
30...	60	--	--	--	.1	12	--	--	--
JUL									
18...	20	--	--	--	--	--	--	--	--

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	PHENOLS (UG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)	TANNIN AND LIGNIN (MG/L)	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV										
28...	1040	--	--	.00	--	--	--	--	.0	--
MAR										
26...	1540	--	.01	--	42	.10	0	.5	.0	--
28...	1130	--	--	--	--	--	--	--	.0	--
MAY										
30...	1145	12	.09	--	2	.20	0	.7	.0	0

DATE	TIME	ATRA-ZINE, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL (UG/L)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV												
28...	1040	.00	.00	--	.0	--	.00	--	.01	--	.00	--
MAR												
26...	1540	--	.00	--	.0	--	.00	--	.04	--	.00	--
28...	1130	.00	.00	--	.0	--	.00	--	.02	--	.00	--
MAY												
30...	1145	.00	.00	.0	.0	0	.01	2.6	.03	15	.01	.0

DATE	DI-AZINON, TOTAL (UG/L)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN TOTAL (UG/L)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)
NOV												
28...	.01	--	.00	--	.02	.00	--	.00	--	.00	--	.00
MAR												
26...	.14	--	.00	--	.01	.01	--	.00	--	.00	--	.00
28...	.00	--	.01	--	.01	.01	--	.00	--	.00	--	.00
MAY												
30...	.10	.0	.01	.3	.01	.00	.1	.00	.0	.00	.0	.00

10254730 ALAMO RIVER NEAR NILAND, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL (UG/L)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METHYL PARA-THION, TOTAL (UG/L)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOTAL (UG/L)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV												
28...	--	.01	--	.00	--	.00	--	.00	--	.00	.04	--
MAR												
26...	--	.00	--	.02	--	.10	--	.00	--	.00	.00	--
28...	--	.00	--	.00	--	.06	--	.00	--	.00	.00	--
MAY												
30...	.0	.00	.0	.03	.0	.00	.0	.00	.0	.00	.00	.0

DATE	PER-THANE TOTAL (UG/L)	PHOS-DRIN, TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	SIMA-ZINE TOTAL (UG/L)	SIME-TRYNE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)
NOV											
28...	.00	.00	.09	--	--	0	--	.00	--	2.2	.00
MAR											
26...	.00	--	.54	--	--	0	--	.00	--	.31	.00
28...	.00	.01	.40	--	--	0	--	.00	--	.00	.00
MAY											
30...	.00	.03	.10	.0	.0	0	0	.00	.0	.13	.00

10254730 ALAMO RIVER NEAR NILAND, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	OCT 25,78
TIME	1415
TOTAL CELLS/ML	6000
DIVERSITY: DIVISION	0.9
.CLASS	0.9
..ORDER	1.4
...FAMILY	1.5
....GENUS	2.1

ORGANISM	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)		
.CHLOROPHYCEAE		
..CHLOROCOCCALES		
...OOCYSTACEAE		
....ANKISTRODESMUS	86	1
..TETRASPORALES		
...PALMELLACEAE		
....SPHAEROCYSTIS	12000#	20
CHRYSOPHYTA		
.BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
....CYCLOTELLA	86	1
CRYPTOPHYTA (CRYPTOMONADS)		
.CRYPTOPHYCEAE		
..CRYPTOMONADALES		
...CRYPTOMONADACEAE		
....CRYPTOMONAS	43	1
CYANOPHYTA (BLUE-GREEN ALGAE)		
.CYANOPHYCEAE		
..CHROOCOCCALES		
...CHROOCOCCACEAE		
....AGMENELLUM	24000#	40
....ANACYSTIS	16000#	27
..HORMOGONALES		
...NOSTOCACEAE		
....CYLINDROSPERMUM	260	4
...RIVULARIACEAE		
....RAPHIDIOPSIS	300	5

NOTE: # - DOMINANT ORGANISM, EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CA

(National stream-quality accounting network station)

LOCATION.--Lat 32°39'57", long 115°30'08", in NE¼SW¼SE¼ sec.14, T.17 S., R.14 E., Imperial County, Hydrologic Unit 18100200, at gaging station at Second Street bridge, 0.2 mi (0.3 km) downstream from international boundary, and 0.2 mi (0.3 km) west of Calexico.

PERIOD OF RECORD.--Water years 1969 to 1971, 1973 to current year.
CHEMICAL ANALYSES: Water years 1969 to 1971, 1973 to current year.
BIOLOGICAL DATA: Water years 1973 to current year.
WATER TEMPERATURES: Water years 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1973 to current year.
WATER TEMPERATURES: October 1973 to current year.

INSTRUMENTATION.--Specific-conductance recorder since October 1973. Temperature recorder since October 1973.

REMARKS.--Records poor. Periods of missing conductivity and temperature data due to equipment malfunction or fouled probe. Discrepency between total and dissolved concentrations due to analytical techniques. Dates without time are composite samples.

COOPERATION.--Discharge records were furnished by Imperial Irrigation District.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 12,000 micromhos July 12, 1978; minimum recorded, 2,240 micromhos Oct. 31, 1976.
WATER TEMPERATURES: Maximum recorded, 36.5°C Sept. 13, 14, 1976; minimum recorded, 10.0°C Dec. 8-11, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 9,680 micromhos June 8; minimum recorded, 2,480 micromhos Aug. 2.
WATER TEMPERATURES: Maximum recorded, 33.5°C several days in September; minimum recorded, 10.0°C Dec. 8-11.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
OCT											
04...	1130	100	7990	7.2	29.5	--	--	--	1.30E+07	--	1100
25...	1010	206	6880	7.5	22.0	--	--	220	--	--	--
25...	1400	217	6900	7.4	24.0	23	.0	--	--	--	900
NOV											
01...	1135	136	8530	7.2	23.0	--	--	--	7000000	--	1100
14...	0945	168	8100	7.6	16.0	4.0	4.6	--	K13000	55000	1100
30...	0910	112	7800	7.6	14.0	--	--	--	--	--	--
DEC											
06...	1200	129	8260	7.6	14.0	--	--	--	3100000	--	1130
08...	1500	128	7600	7.4	13.0	38	3.7	--	--	--	1100
JAN											
03...	0915	132	7340	7.5	14.0	--	--	--	40000	--	1120
30...	1500	167	6800	7.5	13.0	16	7.8	--	--	460000	1100
FEB											
07...	1015	161	8290	7.3	11.5	--	--	--	550000	--	960
21...	1130	169	8100	7.2	16.5	27	4.8	--	4100000	1100000	1100
MAR											
07...	1050	168	8190	7.3	--	--	--	--	1600000	--	1200
27...	0850	178	7550	7.8	20.0	14	.5	120	--	--	1300
APR											
04...	1100	169	8580	7.3	--	--	--	--	2100000	--	1300
24...	1350	189	8600	7.6	25.0	22	.7	--	6500000	2100000	1300
MAY											
02...	1045	185	8100	7.0	20.0	--	--	--	3400000	--	1270
31...	0815	185	5150	7.7	27.0	12	1.4	89	--	--	940
31...	0845	186	5720	7.7	27.0	--	1.4	--	1900000	--	--
JUN											
06...	1115	246	5030	7.3	29.0	--	--	--	4100000	--	800
20...	1000	189	6190	7.5	26.0	31	1.4	--	8400000	2100000	730
JUL											
05...	--	--	3600	7.7	--	--	--	--	--	--	560
17...	1745	333	4240	7.4	33.0	23	.9	--	8000000	690000	610
AUG											
14...	0830	300	6210	7.5	29.0	64	4.2	--	3.00E+07	70000	1200
SEP											
06...	--	--	3800	7.7	--	--	--	--	--	--	1100
12...	0730	170	7900	7.4	30.5	27	.8	--	1750000	420000	1100

K Results based on colony count outside the acceptable range (non-ideal colony count).

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFIDE TOTAL (MG/L AS S)
OCT											
04...	850	246	110	1300	70	17	110	0	243	38	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	670	210	91	1100	70	16	81	--	238	--	--
NOV											
01...	924	270	123	1300	69	17	125	0	256	31	--
14...	920	260	120	1700	72	22	210	--	220	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
DEC											
06...	870	258	118	1325	69	17	120	0	253	12	--
08...	830	260	110	1400	72	18	72	--	270	--	--
JAN											
03...	860	250	121	1140	67	15	87	0	253	16	--
30...	890	270	110	1100	66	14	94	--	240	--	--
FEB											
07...	734	214	104	960	66	13	82	0	226	22	--
21...	890	260	120	1400	70	18	120	--	250	--	--
MAR											
07...	962	268	129	1275	67	16	120	0	230	23	--
27...	1100	290	140	1400	68	17	130	--	240	--	--
APR											
04...	1040	286	143	1340	67	16	116	--	253	25	--
24...	1100	280	150	1300	66	16	110	--	260	--	--
MAY											
02...	1004	264	149	1275	67	16	94	0	266	52	--
31...	740	210	100	800	63	11	66	--	200	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
JUN											
06...	600	170	91	735	59	11	234	0	192	19	--
20...	540	170	75	700	65	11	55	--	190	--	--
JUL											
05...	390	--	57	460	75	--	.7	--	170	--	.5
17...	450	160	50	630	67	11	52	--	160	--	--
AUG											
14...	1000	270	130	1300	68	16	100	--	190	--	--
SEP											
06...	920	--	130	1200	55	--	110	--	210	--	.2
12...	910	250	120	1200	67	16	120	--	210	--	--

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT											
04...	755	2150	.9	28	5200	4850	--	.05	.20	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	670	1700	.6	24	3910	4010	--	--	--	--	.01
NOV											
01...	750	2350	1.0	22	5600	5100	--	.05	.20	--	--
14...	780	2700	.7	34	6300	5940	--	--	--	--	1.2
30...	--	--	--	--	--	--	--	--	--	--	--
DEC											
06...	715	2250	.8	21	5290	4960	--	.07	.30	--	--
08...	760	2200	.8	24	5240	4990	--	--	--	--	.01
JAN											
03...	725	1925	.8	17	4720	4420	--	.59	2.6	--	--
30...	720	1800	.6	22	4450	4260	--	--	--	--	.53
FEB											
07...	615	1625	1.0	22	4080	3760	--	.11	.50	--	--
21...	730	2300	.7	24	5070	5110	--	--	--	--	.03
MAR											
07...	725	2225	.9	21	5320	4910	--	.43	1.9	--	--
27...	950	2400	.7	23	5450	5480	--	--	--	--	.39
APR											
04...	830	2300	.8	25	5530	5190	--	.02	.10	--	--
24...	690	2100	.7	24	5440	5010	--	--	--	--	.02
MAY											
02...	810	2150	.7	32	5290	4960	--	.18	.08	--	--
31...	660	1400	.6	20	3690	3300	--	--	--	--	.23
31...	--	--	--	--	--	--	--	--	--	--	--
JUN											
06...	565	1200	.6	21	3110	2950	--	.11	.50	--	--
20...	540	1100	.6	19	2930	2770	--	--	--	--	.33
JUL											
05...	460	650	--	15	--	--	.07	--	--	.41	.48
17...	520	970	.6	19	2660	2500	--	--	--	--	.37
AUG											
14...	740	2300	.6	27	5290	4980	--	--	--	--	2.1
SEP											
06...	820	2100	--	32	--	--	.15	--	--	.65	.70
12...	810	2000	.7	36	4670	4670	--	--	--	--	.94

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)
OCT											
04...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	2.8	--	3.4	6.2	1.5	4.7	6.2	1.90	1.50	1.2
NOV											
01...	--	--	--	--	--	--	--	--	--	--	--
14...	--	1.9	--	1.5	3.4	1.0	2.4	4.8	.56	.30	--
30...	--	--	--	--	--	--	--	--	--	--	--
DEC											
06...	--	--	--	--	--	--	--	--	--	--	--
08...	--	6.6	--	4.4	11	1.4	9.6	11	3.10	2.00	2.3
JAN											
03...	--	--	--	--	--	--	--	--	--	--	--
30...	--	7.1	--	2.1	9.2	2.0	7.2	9.7	2.00	1.60	--
FEB											
07...	--	--	--	--	--	--	--	--	--	--	--
21...	--	7.3	--	2.7	10	2.2	7.8	10	2.00	1.60	--
MAR											
07...	--	--	--	--	--	--	--	--	--	--	--
27...	--	3.7	--	5.1	8.8	4.1	4.7	9.2	.83	.63	--
APR											
04...	--	--	--	--	--	--	--	--	--	--	--
24...	--	5.7	--	.40	6.1	1.0	5.1	6.1	1.10	1.10	--
MAY											
02...	--	--	--	--	--	--	--	--	--	--	--
31...	--	1.6	--	2.4	4.0	.50	3.5	4.3	.57	.50	--
31...	--	--	--	--	--	--	--	--	--	--	--
JUN											
06...	--	--	--	--	--	--	--	--	--	--	--
20...	--	2.4	--	5.6	8.0	4.7	3.3	8.3	.77	.43	--
JUL											
05...	.58	2.3	1.9	2.0	--	3.9	--	4.4	.60	--	.30
17...	--	2.3	--	2.6	4.9	4.8	.14	5.3	.80	.61	--
AUG											
14...	--	1.6	--	1.5	3.1	.80	2.3	5.2	.36	.17	--
SEP											
06...	.73	3.6	3.0	.00	--	.04	--	.74	.64	--	.45
12...	.87	2.3	--	--	--	--	1.6	--	.59	.50	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
OCT										
24-25	--	13	--	100	--	--	--	7	--	--
25-26	--	15	--	100	--	--	--	4	--	--
26-27	--	17	--	200	--	--	--	12	--	--
NOV										
30...	0910	--	30	--	--	100	2200	--	--	13
DEC										
08...	--	34	--	300	--	--	--	14	--	--
JAN										
30...	1500	25	25	0	0	0	--	--	0	0
MAR										
27...	0850	--	--	100	--	--	--	--	--	--
APR										
24...	1350	25	20	200	0	200	--	2	1	1
MAY										
31...	0815	--	--	200	--	--	--	--	--	--
JUL										
05...	--	14	--	200	--	--	--	0	--	--
17...	1745	21	10	200	0	200	--	2	1	1
AUG										
15...	--	29	--	200	--	--	--	1	--	--
SEP										
06...	--	46	--	300	--	--	--	0	--	--
06...	1000	46	--	300	--	--	--	0	--	--
26...	--	30	--	300	--	--	--	1	--	--

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, SUS- PENDED RECOV. (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, SUS- PENDED RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, SUS- PENDED RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
OCT										
24-25	0	--	--	2	--	--	13	--	--	--
25-26	20	--	--	0	--	--	20	--	--	--
26-27	0	--	--	1	--	--	20	--	--	--
NOV										
30...	--	--	--	--	--	--	--	--	10	--
DEC										
08...	10	--	--	1	--	--	64	--	--	--
JAN										
30...	20	20	0	4	3	1	45	43	2	810
MAR										
27...	1	--	--	--	--	--	30	--	--	--
APR										
24...	20	10	10	--	--	1	33	27	6	990
MAY										
31...	0	--	--	--	--	--	25	--	--	--
JUL										
05...	10	--	--	2	--	--	31	--	--	--
17...	10	10	0	0	0	0	71	68	3	3300
AUG										
16...	20	--	--	2	--	--	33	--	--	--
SEP										
06...	10	--	--	0	--	--	20	--	--	--
08...	10	--	--	0	--	--	20	--	--	--
26...	10	--	--	0	--	--	29	--	--	--

DATE	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, SUS- PENDED RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDED RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY SUS- PENDED RECOV- ERABLE (UG/L AS HG)
OCT										
24-25	--	80	140	--	--	--	--	140	.0	--
25-26	--	80	230	--	--	--	--	130	.0	--
26-27	--	60	170	--	--	--	--	140	.1	--
NOV										
30...	--	--	--	--	0	--	--	130	--	--
DEC										
08...	--	40	100	--	--	--	--	120	.0	--
JAN										
30...	740	70	34	12	22	280	30	170	.0	.0
MAR										
27...	--	--	--	--	--	--	--	--	.0	--
APR										
24...	920	70	35	29	6	230	30	200	.1	.0
MAY										
31...	--	--	--	--	--	--	--	--	.1	--
JUL										
05...	--	0	25	--	--	--	--	20	1.1	--
17...	3300	10	40	40	0	260	120	140	.3	.2
AUG										
16...	--	--	73	--	--	--	--	100	1.6	--
SEP										
06...	--	60	20	--	--	--	--	110	.2	--
08...	--	60	20	--	--	--	--	110	.2	--
26...	--	60	46	--	--	--	--	120	.1	--

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDED TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDED RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDED RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT										
24-25	--	3	--	--	--	--	--	100	--	--
25-26	--	4	--	--	--	--	--	14000	--	--
26-27	--	3	--	--	--	--	--	70	--	--
NOV										
30...	--	--	--	--	--	--	--	--	--	20
DEC										
08...	--	5	--	--	--	--	--	60	--	--
JAN										
30...	.0	3	0	3	1	1	0	90	60	30
MAR										
27...	--	--	--	--	--	--	--	--	--	--
APR										
24...	.1	3	1	2	0	0	0	60	20	40
MAY										
31...	--	--	--	--	--	--	--	--	--	--
JUL										
05...	--	2	--	--	--	--	--	120	--	--
17...	.1	2	0	2	0	0	0	90	60	30
AUG										
16...	--	3	--	--	--	--	--	110	--	--
SEP										
06...	--	2	--	--	--	--	--	50	--	--
08...	--	2	--	--	--	--	--	50	--	--
26...	--	2	--	--	--	--	--	70	--	--

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	PHENOLS (UG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	OIL AND GREASE (MG/L)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)	TANNIN AND LIGNIN (MG/L)	PCB, TOTAL (UG/L)
OCT											
23...	1400	--	--	--	--	--	6.1	--	--	--	--
23...	1415	--	--	.01	--	210	--	14	--	3.0	--
23...	1700	--	--	--	--	--	7.5	--	--	--	--
23...	1900	--	--	.01	--	220	--	12	--	3.0	--
23...	2000	--	--	--	--	--	5.0	--	--	--	--
23...	2300	--	--	--	--	--	5.0	--	--	--	--
23-24	--	--	--	--	.00	--	--	--	--	--	.0
24...	0200	--	--	.01	--	220	3.3	4	--	3.0	--
24...	0500	--	--	--	--	--	2.4	--	--	--	--
24...	0700	--	--	.01	--	170	--	4	--	2.0	--
24...	0800	--	--	--	--	--	2.4	--	--	--	--
24...	1100	--	--	--	--	--	2.6	--	--	--	--
24...	1400	--	--	--	--	--	5.0	--	--	--	--
24...	1500	--	--	.00	--	100	--	33	--	5.0	--
24...	1700	--	--	--	--	--	4.0	--	--	--	--
24...	1900	--	--	.01	--	130	--	16	--	3.0	--
24...	2000	--	--	--	--	--	4.1	--	--	--	--
24...	2300	--	--	--	--	--	5.0	--	--	--	--
24-25	--	19	14	--	--	--	--	--	--	--	.0
25...	0115	--	--	.02	--	70	--	6	--	2.0	--
25...	0200	--	--	.01	--	30	3.1	29	--	5.0	--
25...	0500	--	--	--	--	--	2.3	--	--	--	--
25...	0700	--	--	.00	--	35	--	3	--	1.0	--
25...	0800	--	--	.00	--	24	1.7	18	--	4.0	--
25...	1010	58	--	--	--	--	--	--	38	4.0	--
25...	1100	--	--	--	--	--	1.9	--	--	--	--
25...	1400	13	--	--	--	--	3.7	--	--	--	--
25...	1700	--	--	--	--	--	4.0	--	--	--	--
25...	2000	--	--	--	--	--	3.9	--	--	--	--
25...	2300	--	--	--	--	--	3.7	--	--	--	--
25-26	--	19	16	--	--	--	--	--	--	--	.0
26...	0200	--	--	.01	--	22	3.0	11	--	2.0	--
26...	0500	--	--	--	--	--	6.8	--	--	--	--
26...	0800	--	--	.01	--	18	1.9	15	--	2.0	--
26...	0935	85	--	--	--	--	--	89	--	5.0	--
26...	1100	--	--	--	--	--	3.0	--	--	--	--
26...	1400	--	--	--	--	--	5.8	--	--	--	--
26...	1500	--	--	.01	--	18	--	9	--	3.0	--
26...	1700	--	--	--	--	--	6.6	--	--	--	--

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	OIL AND GREASE (MG/L)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)	TANNIN AND LIGNIN (MG/L)	PCB, TOTAL (UG/L)
OCT											
26...	1900	--	--	--	.01	18	--	11	--	2.0	--
26...	2000	--	--	--	--	--	6.2	--	--	--	--
26...	2300	--	--	--	--	--	6.4	--	--	--	--
26-27	--	21	15	--	--	--	--	--	--	--	.0
27...	0200	--	--	--	.01	32	5.2	5	--	2.0	--
27...	0500	--	--	--	--	--	3.2	--	--	--	--
27...	0800	--	--	--	--	--	2.8	--	--	--	--
27...	0815	--	--	--	.01	14	--	4	--	3.0	--
27...	1100	--	--	--	--	--	3.0	--	--	--	--
NOV											
13...	0900	--	--	--	--	--	3.2	--	--	--	--
13...	1000	--	--	--	--	--	4.0	--	--	--	--
13...	1100	--	--	--	--	--	5.0	--	--	--	--
13...	1200	--	--	--	.01	22	6.5	7	--	5.0	--
13...	1300	--	--	--	--	--	8.0	--	--	--	--
13...	1345	106	--	--	--	--	--	60	--	6.0	--
13...	1400	--	--	--	--	--	7.8	--	--	--	--
13...	1500	--	--	--	--	--	8.4	--	--	--	--
13...	1600	--	--	--	--	--	9.3	--	--	--	--
13...	1700	--	--	--	--	--	9.5	--	--	--	--
13...	1800	--	--	--	.01	40	6.0	4	--	3.0	--
13...	1900	--	--	--	--	--	8.3	--	--	--	--
13...	2000	--	--	--	--	--	7.2	--	--	--	--
14...	0945	15	--	--	--	--	--	--	--	--	--
DEC											
08...	--	42	25	--	--	--	--	--	--	--	--
08...	0600	--	--	--	--	--	3.2	--	--	--	--
08...	0700	--	--	--	--	--	3.0	--	--	--	--
08...	0800	--	--	--	--	--	3.1	--	--	--	--
08...	0900	--	--	--	--	--	3.0	--	--	--	--
08...	1000	--	--	--	--	--	3.0	--	--	--	--
08...	1100	--	--	--	.01	95	4.0	--	26	7.0	--
08...	1200	--	--	--	--	--	5.5	--	--	--	--
08...	1300	--	--	--	--	--	7.5	--	--	--	--
08...	1400	--	--	--	--	--	8.3	--	--	--	--
08...	1500	40	--	--	.01	87	9.3	--	14	3.0	--
08...	1600	--	--	--	--	--	9.0	--	--	--	--
08...	1700	--	--	--	--	--	9.0	--	--	--	--
JAN											
30...	1500	--	17	3.9	--	--	--	--	--	--	--

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)	TANNIN AND LIGNIN (MG/L)	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
FEB											
21...	1130	31	--	--	--	--	--	--	--	--	--
MAR											
27...	0850	29	--	--	.01	35	1.4	2	3.0	.0	--
APR											
24...	1350	--	14	14	--	--	--	--	--	--	--
MAY											
31...	0815	28	--	--	.00	7	.80	2	2.0	.1	73
JUN											
20...	1000	31	--	--	--	--	--	--	--	--	--
JUL											
05...	--	16	15	--	--	--	--	--	--	.0	--
05...	1100	--	--	--	--	--	.50	--	--	--	--
05...	1200	--	--	--	--	--	.70	--	--	--	--
05...	1300	--	--	--	--	--	.80	--	--	--	--
05...	1400	--	--	--	--	--	.80	--	--	--	--
05...	1500	--	--	--	.00	6	1.0	0	1.0	--	--
05...	1700	--	--	--	--	--	.90	--	--	--	--
05...	1800	--	--	--	--	--	.90	--	--	--	--
05...	1900	--	--	--	.00	5	--	0	1.0	--	--
05...	2000	--	--	--	--	--	1.0	--	--	--	--
05...	2100	--	--	--	--	--	.80	--	--	--	--
05...	2200	--	--	--	--	--	.90	--	--	--	--
17...	1745	18	12	.1	--	--	--	--	--	--	--
AUG											
14...	0800	22	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	.1	--
16...	0700	--	--	--	--	--	.70	--	--	--	--
16...	0800	--	--	--	--	--	.70	--	--	--	--
16...	0900	--	--	--	--	--	.80	--	--	--	--
16...	1000	--	--	--	.01	6	.80	0	2.0	--	--
16...	1100	--	--	--	--	--	.90	--	--	--	--
16...	1200	--	--	--	--	--	1.1	--	--	--	--
16...	1300	--	--	--	--	--	1.5	--	--	--	--
16...	1400	--	--	--	--	--	1.6	--	--	--	--
16...	1500	--	--	--	--	--	1.9	--	--	--	--
16...	1600	--	--	--	.01	10	1.7	2	2.0	--	--
16...	1700	--	--	--	--	--	1.9	--	--	--	--
16...	1800	--	--	--	--	--	1.6	--	--	--	--
SEP											
06...	--	18	15	--	--	--	--	--	--	.0	--

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)	TANNIN AND LIGNIN (MG/L)	PCB, TOTAL (UG/L)
SEP									
06...	0600	--	--	--	--	.90	--	--	--
06...	0700	--	--	--	--	.90	--	--	--
06...	0800	--	--	--	--	.99	--	--	--
06...	0900	--	--	--	--	.90	--	--	--
06...	0930	--	--	.01	37	--	3	2.0	--
06...	1000	--	--	--	--	1.2	--	--	--
06...	1100	--	--	--	--	1.6	--	--	--
06...	1200	--	--	--	--	1.0	--	--	--
06...	1300	--	--	--	--	1.7	--	--	--
06...	1400	--	--	--	--	1.5	--	--	--
06...	1430	--	--	.01	24	--	2	2.0	--
06...	1500	--	--	--	--	1.7	--	--	--
06...	1600	--	--	--	--	1.8	--	--	--
06...	1700	--	--	--	--	3.1	--	--	--
06...	1800	18	15	--	--	--	--	--	--
12...	0730	25	--	--	--	--	--	--	--
26...	--	24	20	--	--	--	--	--	.1
26...	0600	--	--	--	--	1.3	--	--	--
26...	0700	--	--	--	--	1.4	--	--	--
26...	0800	--	--	--	--	1.6	--	--	--
26...	0900	--	--	--	--	1.5	--	--	--
26...	0930	--	--	.01	28	--	2	5.0	--
26...	1000	--	--	--	--	1.8	--	--	--
26...	1100	--	--	--	--	2.5	--	--	--
26...	1200	--	--	--	--	2.6	--	--	--
26...	1300	--	--	--	--	3.0	--	--	--
26...	1400	--	--	--	--	3.1	--	--	--
26...	1430	--	--	.01	23	--	6	4.0	--
26...	1500	--	--	--	--	3.4	--	--	--
26...	1600	--	--	--	--	3.2	--	--	--
26...	1700	--	--	--	--	3.2	--	--	--

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL (UG/L)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL (UG/L)
OCT												
23-24	--	.00	--	.0	--	.03	--	.00	--	.15	--	.49
24-25	--	.00	--	.0	--	.04	--	.03	--	.00	--	.23
25-26	--	.00	--	.0	--	.03	--	.00	--	.23	--	.18
26-27	--	.00	--	.0	--	.06	--	.03	--	.00	--	.00
MAR												
27...	0850	.00	--	.0	--	.02	--	.01	--	.02	--	.06
MAY												
31...	0815	.02	.0	.0	64	.02	56	.01	17	.06	27	.08
JUL												
05...	--	.01	--	.0	--	.01	--	.00	--	.02	--	.16
AUG												
16...	--	.00	--	.2	--	.05	--	.02	--	.07	--	.09
SEP												
06...	--	.00	--	.1	--	.01	--	.00	--	.01	--	.16
26...	--	.00	--	.1	--	.03	--	.00	--	.05	--	.19

DATE	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN TOTAL (UG/L)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOTAL (UG/L)
OCT											
23-24	--	.00	--	.01	.00	--	.00	--	.00	--	.00
24-25	--	.00	--	.00	.00	--	.00	--	.00	--	.01
25-26	--	.00	--	.00	.00	--	.00	--	.00	--	.00
26-27	--	.00	--	.00	.00	--	.00	--	.00	--	.02
MAR											
27...	--	.00	--	.00	.00	--	.00	--	.00	--	.00
MAY											
31...	.0	.00	4.5	.00	.00	.0	.00	.0	.00	.0	.00
JUL											
05...	--	.00	--	.00	.00	--	.00	--	.00	--	.00
AUG											
16...	--	.01	--	.00	.00	--	.00	--	.00	--	.01
SEP											
06...	--	.01	--	.00	.00	--	.00	--	.00	--	.00
26...	--	.02	--	.00	.00	--	.00	--	.00	--	.00

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL (UG/L)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOTAL (UG/L)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL (UG/L)
OCT											
23-24	--	.17	--	.22	--	--	.00	--	.00	--	.00
24-25	--	.59	--	.00	--	--	.02	--	.00	--	.00
25-26	--	.01	--	.00	--	--	.02	--	.00	--	.00
26-27	--	.43	--	.00	--	--	.01	--	.00	--	.00
MAR											
27...	--	.06	--	.06	--	--	.00	--	.00	--	.00
MAY											
31...	.0	.00	.0	.12	.0	--	.00	.0	.00	.0	.00
JUL											
05...	--	.00	--	.23	--	--	.00	--	.00	--	.00
AUG											
16...	--	.00	--	.03	--	--	.00	--	.00	--	.00
SEP											
06...	--	.00	--	.44	--	--	.00	--	.00	--	.00
26...	--	.00	--	.67	--	.00	.00	--	.00	--	.00

DATE	PARATHION, TOTAL (UG/L)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE TOTAL (UG/L)	PHOSDRIN, TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOTAL TRITHION (UG/L)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)
OCT											
23-24	.00	--	.00	.00	.00	0	--	.00	--	.00	.00
24-25	.00	--	.00	.00	.00	0	--	.00	--	.00	.00
25-26	.00	--	.00	.00	.00	0	--	.00	--	.05	.00
26-27	.00	--	.00	.00	.00	0	--	.00	--	.09	.00
MAR											
27...	.00	--	.00	--	.00	0	--	.00	--	.00	.00
MAY											
31...	.00	.0	.00	--	--	0	0	.00	.0	--	--
JUL											
05...	--	--	.00	.00	.00	0	--	--	--	.34	.00
AUG											
16...	--	--	.00	--	.00	0	--	--	--	.00	.00
SEP											
06...	--	--	.00	.00	.00	0	--	--	--	.41	.09
26...	.00	--	.00	.00	.00	0	--	10	--	.00	.07

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	OCT 24,78	NOV 14,78	DEC 8,78	MAR 27,79
TIME	0915	0945	1500	0850
TOTAL CELLS/ML	120000	58000	51000	13000
DIVERSITY: DIVISION	0.3	0.5	0.1	1.4
.CLASS	0.3	0.5	0.1	1.4
..ORDER	1.1	1.5	0.3	2.0
...FAMILY	1.4	1.6	0.3	2.2
....GENUS	1.7	0.8	0.4	3.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	--	-	--	-	--	-	--	-
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	1800	2	2400	4	*	0	94	1
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	94	1
....OOCYSTIS	--	-	--	-	--	-	--	-
....TETRAEDRON	--	-	--	-	--	-	--	-
....TREUBARIA	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....ACTINASTRUM	1800	2	--	-	--	-	--	-
....CRUCIGENIA	--	-	--	-	--	-	2500#	19
....SCENEDESMUS	--	-	*	0	--	-	1100	9
....TETRASTRUM	--	-	--	-	--	-	380	3
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	270	1	2800#	22
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...CHAETOCERACEAE								
....CHAETOCEROS	660	1	--	-	--	-	--	-
...COSCINODISCACEAE								
....CYCLOTELLA	660	1	1600	3	--	-	2800#	22
....MELOSIRA	--	-	820	1	--	-	--	-
....STEPHANODISCUS	--	-	--	-	--	-	1700	13
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	*	0	--	-
....COCCONEIS	--	-	--	-	*	0	--	-
...CYMBELLACEAE								
....AMPHORA	--	-	--	-	*	0	--	-
....CYMBELLA	--	-	--	-	--	-	94	1
...NAVICULACEAE	--	-	*	0	--	-	--	-
....NAVICULA	--	-	--	-	*	0	94	1
...NITZSCHIACEAE								
....NITZSCHIA	*	0	*	0	*	0	190	1
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	--	-	--	-	94	1
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....AGMENELLUM	76000#	65	27000#	46	1200	2	--	-
....ANACYSTIS	1500	1	3900	7	*	0	--	-
....COCCOCHLORIS	--	-	--	-	*	0	--	-
..HORMOGONALES								
...NOSTOCACEAE								
....CYLINDROSPERMUM	3200	3	--	-	--	-	--	-
...OSCILLATORIACEAE								
....LYNGBYA	16000	14	1200	2	--	-	--	-
....OSCILLATORIA	14000	12	20000#	35	49000#	96	--	-
....SPIRULINA	*	0	--	-	--	-	--	-
...RIVULARIACEAE								
....RAPHIDIOPSIS	*	0	820	1	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	--	-	--	-	750	6
....TRACHELOMONAS	--	-	--	-	--	-	380	3
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..PERIDINIALES								
...GLENODINIACEAE								
....GLENODINIUM	--	-	--	-	--	-	--	-

See footnotes at end of table.

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	MAY 31,79	AUG 14,79	SEP 12,79
TIME	0815	0800	0730
TOTAL CELLS/ML	480000	47000	98000
DIVERSITY: DIVISION	0.3	1.0	1.2
.CLASS	0.3	1.0	1.2
..ORDER	0.3	1.9	1.9
...FAMILY	0.3	2.0	2.1
....GENUS	0.4	2.2	2.7

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...CHARACIACEAE						
....SCHROEDERIA	--	-	460	1	*	0
...COELASTRACEAE						
....COELASTRUM	*	0	--	-	--	-
...OOCYSTACEAE						
....ANKISTRODESMUS	*	0	460	1	--	-
....DICTYOSPHAERIUM	*	0	1400	3	--	-
....KIRCHNERIELLA	--	-	--	-	--	-
....OOCYSTIS	*	0	--	-	--	-
....TETRAEDRON	--	-	--	-	*	0
....TREUBARIA	--	-	*	0	--	-
...SCENEDESMACEAE						
....ACTINASTRUM	--	-	--	-	--	-
....CRUCIGENIA	--	-	--	-	15000#	15
....SCENEDESMUS	4800	1	--	-	--	-
....TETRASTRUM	*	0	460	1	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	*	0	*	0	570	1
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...CHAETOCERACEAE						
....CHAETOCEROS	--	-	--	-	2300	2
...COSCINODISCACEAE						
....CYCLOTELLA	4700	1	7000	15	8700	9
....MELOSIRA	*	0	--	-	750	1
....STEPHANODISCUS	2700	1	--	-	--	-
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	--	-
....COCCONEIS	--	-	--	-	--	-
...CYMBELLACEAE						
....AMPHORA	--	-	--	-	--	-
....CYMBELLA	--	-	--	-	--	-
...NAVICULACEAE	--	-	--	-	--	-
....NAVICULA	--	-	--	-	--	-
...NITZSCHIACEAE						
....NITZSCHIA	*	0	800	2	*	0
CRYPTOPHYTA (CRYPTOMONADS)						
.CRYPTOPHYCEAE						
..CRYPTOMONADALES						
...CRYPTOMONADACEAE						
....CRYPTOMONAS	--	-	*	0	*	0
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....AGMENELLUM	*	0	18000#	39	6800	7
....ANACYSTIS	*	0	2200	5	19000#	19
....COCCOCHLORIS	--	-	--	-	--	-
..HORMOGONALES						
...NOSTOCACEAE						
....CYLINDROSPERMUM	--	-	--	-	940	1
...OSCILLATORIACEAE						
....LYNGBYA	--	-	--	-	28000#	28
....OSCILLATORIA	460000#	96	15000#	33	15000#	16
....SPIRULINA	--	-	--	-	--	-
...RIVULARIACEAE						
....RAPHIDIOPSIS	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)						
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....EUGLENA	*	0	*	0	--	-
....TRACHELOMONAS	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)						
.DINOPHYCEAE						
..PERIDINIALES						
...GLENODINIACEAE						
....GLENODINIUM	--	-	*	0	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PERIPHYTON

DATE	TIME	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	LENGTH OF EXPOSURE (DAYS)
OCT 24...	0915	1.22	.000	--	--	119
APR 25...	1430	10.3	.160	2.73	1.67	63
JUN 20...	1000	.102	.008	--	--	20

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	6720	6340	6520	5660	5480	5580
2	---	---	---	---	---	---	6460	6220	6320	5760	5640	5700
3	---	---	---	7680	5220	5580	7800	5960	6580	5680	5280	5450
4	5360	4880	5210	7840	7240	7590	7680	6940	7260	---	---	---
5	5480	5080	5270	7260	6720	7000	7040	6640	6800	5120	4880	4960
6	7340	5060	5950	7400	6800	7000	6780	6580	6670	---	---	---
7	7000	5720	6320	6820	5720	6420	6780	6580	6670	5360	5000	5140
8	---	---	---	6960	---	---	9460	6740	8870	5500	5320	5410
9	---	---	---	8060	6920	7530	9640	8160	8760	5500	5360	5450
10	6520	---	---	8060	7560	7800	8980	7560	8230	---	---	---
11	6840	5680	6360	7560	5920	7110	8080	7140	7590	---	---	---
12	7180	6380	6800	5920	5560	5730	8060	7540	7770	---	---	---
13	7180	6620	6910	5680	5340	5540	8080	7660	7900	5560	4960	5300
14	6960	5940	6460	8660	5680	7530	8400	7740	8000	5880	5580	5750
15	7600	5220	6990	8640	8120	8340	8200	7600	7930	6240	5880	6010
16	7540	7040	7310	9180	7500	8190	8480	7320	7810	6360	6260	6320
17	7500	6940	7170	9260	8980	9100	7500	6740	7090	6260	5640	5880
18	7280	6520	6880	9060	8580	8780	7340	5840	6950	---	---	---
19	7680	6920	7250	8820	8200	8470	5660	4300	4930	5300	5000	5100
20	8100	7340	7630	8400	8040	8190	---	---	---	---	---	---
21	7660	5160	5790	8480	7920	8230	---	---	---	---	---	---
22	6480	4480	5580	8640	8060	8340	7000	4400	5400	---	---	---
23	6520	6260	6400	8520	8400	8470	6200	5460	5770	5180	4700	4990
24	6720	5920	6330	8540	8320	8410	5640	5460	5550	---	---	---
25	6780	6440	6600	8320	8080	8180	5440	5060	5220	---	---	---
26	6460	5920	6290	8080	5720	6840	5260	5060	5190	---	---	---
27	6500	5600	6180	5680	5060	5260	5360	5160	5260	4800	4580	4690
28	5620	5360	5540	---	---	---	5400	5240	5320	---	---	---
29	5620	5380	5500	---	---	---	---	---	---	---	---	---
30	5440	4740	5140	7500	---	---	5200	4900	4990	4800	4660	4750
31	---	---	---	---	---	---	5560	5220	5410	6700	5240	5840
MONTH	8100	---	---	9260	5060	7480	9640	4300	6670	---	---	---

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6880	6200	6550	7620	7340	7470	7600	6840	7210	8220	8040	8140
2	6480	6000	6220	7700	7500	7620	7600	7080	7330	8320	7720	8030
3	6040	5960	6010	7740	7440	7570	7420	7020	7250	7760	6080	7360
4	6040	5720	5850	7620	7260	7410	7420	7020	7260	6900	5860	6490
5	5800	5540	5670	7380	6960	7160	7620	7080	7370	---	---	---
6	5760	5320	5500	7140	6660	6870	7580	7140	7360	---	---	---
7	5580	5080	5330	7040	6760	6900	7240	6560	6870	---	---	---
8	5640	5400	5510	7120	5380	6780	6680	6260	6500	---	---	---
9	5960	5600	5760	7120	6920	7050	6640	---	---	---	---	---
10	6180	5940	6050	7180	6840	7010	5940	---	---	---	---	---
11	6340	6140	6230	7040	5280	6440	5880	---	---	---	---	---
12	6380	6200	6300	---	---	---	6660	---	---	5260	3440	4370
13	6400	6200	6270	---	---	---	7480	5500	7040	---	---	---
14	7900	4780	6480	---	---	---	---	---	---	---	---	---
15	8140	7520	7920	---	---	---	---	---	---	---	---	---
16	8200	7620	7960	7280	5860	6450	---	---	---	---	---	---
17	8280	7760	7990	7280	6600	7050	---	---	---	---	---	---
18	8180	7620	7900	6520	---	5500	---	---	---	---	---	---
19	8060	7720	7890	---	---	---	---	---	---	---	---	---
20	8160	7680	7830	---	---	---	7640	4540	5760	---	---	---
21	8080	7620	7860	6900	4500	5440	7660	7260	7420	---	---	---
22	8020	7860	7940	6940	6680	6810	7220	6820	7050	---	---	---
23	8060	7820	7960	6920	6560	6730	7380	7000	7180	---	---	---
24	8040	7720	7870	6800	6340	6660	8700	6760	7600	---	---	---
25	7940	7660	7800	6740	6320	6590	8820	5700	8040	---	---	---
26	7860	7620	7720	6720	6280	6470	8620	5900	7750	---	---	---
27	7760	7520	7630	6520	6320	6390	8360	6120	7970	---	---	---
28	7680	7360	7510	6320	---	---	---	7500	---	---	---	---
29	---	---	---	7580	4920	6280	7980	7280	7530	---	---	---
30	---	---	---	7700	7360	7520	8100	7640	7880	---	---	---
31	---	---	---	7600	7140	7340	---	---	---	---	---	---
MONTH	8280	4780	6910	7740	---	---	---	---	---	---	---	---

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9000	7260	8100	6480	6040	6210	---	---	---	7740	7180	7440
2	7840	4820	6410	6520	6000	6230	6420	2480	3780	---	---	---
3	---	---	---	6180	5800	5950	6420	6000	6220	---	---	---
4	---	---	---	6360	5960	6120	6620	6200	6430	---	---	---
5	---	---	---	6240	2960	4710	7020	6640	6860	---	---	---
6	---	---	---	6020	3060	4820	7140	6820	6960	---	---	---
7	---	---	---	5420	5080	5220	6940	6700	6810	---	---	---
8	9680	3260	5680	5080	4300	4650	6780	6420	6580	---	---	---
9	---	---	---	4340	3720	4160	6480	5760	6100	---	---	---
10	---	---	---	4480	---	---	5920	5260	5620	---	---	---
11	---	---	---	---	---	---	8320	5060	6590	---	---	---
12	---	---	---	---	---	---	8020	6560	7350	---	---	---
13	---	---	---	---	---	---	6500	5060	5710	---	---	---
14	---	---	---	---	---	---	5120	4740	4940	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	5120	3720	4340	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	8640	4120	5450	---	---	---
18	---	---	---	---	---	---	9080	4820	5720	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	9200	5800	7590	---	---	---	---	---	---
21	---	---	---	5860	5380	5670	---	---	---	---	---	---
22	---	---	---	5340	4880	5060	---	---	---	---	---	---
23	---	---	---	5340	4680	5010	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	7700	7380	7560	---	---	---	8860	8260	8580	---	---	---
27	7540	7000	7250	---	---	---	8240	7160	7730	---	---	---
28	7160	6580	6930	5000	2700	3880	7400	6800	7080	---	---	---
29	7040	4860	6690	4820	4360	4550	6940	6400	6660	---	---	---
30	6740	5860	6360	4420	4120	4260	---	---	---	---	---	---
31	---	---	---	4400	4100	4210	9420	7420	7980	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	9680	2480	6660									

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	30.5	28.0	29.5	23.5	20.5	22.0	17.5	15.0	16.0			
2	30.5	27.5	29.0	23.0	20.5	22.0	17.5	14.0	15.5			
3	30.5	28.0	29.0	22.5	19.5	21.0	17.0	13.5	15.0			
4	30.0	27.5	29.0	23.0	20.0	21.5	16.5	13.5	15.0			
5	29.5	27.5	28.5	23.0	20.5	22.0	16.5	13.5	15.0			
6	29.5	27.0	28.0	23.0	20.5	22.0	15.5	12.0	14.0			
7	29.5	26.5	28.0	23.0	20.0	21.5	14.5	11.0	13.0			
8	29.5	26.5	28.0	22.0	20.0	21.5	13.5	10.0	12.0			
9	29.5	26.5	28.0	23.0	20.0	21.5	13.5	10.0	12.0			
10	29.5	26.5	27.5	22.0	21.0	21.5	13.5	10.0	12.0			
11	29.0	25.5	27.5	21.0	20.0	20.5	13.0	10.0	12.0			
12	27.5	25.0	27.0	20.5	18.5	19.5	14.0	10.5	12.0			
13	27.5	24.5	26.5	19.5	18.0	19.0	14.0	11.0	12.5			
14	27.5	25.0	26.5	19.0	15.0	17.5	14.0	11.5	13.0			
15	27.5	25.0	26.0	18.0	15.0	16.5	14.0	12.0	13.0			
16	26.5	24.5	25.5	17.5	14.5	16.0	14.5	13.5	14.0			
17	26.5	25.0	26.0	17.0	14.5	16.0	15.0	13.5	14.0			
18	26.5	25.0	26.0	17.0	14.0	16.0	14.5	13.0	13.5			
19	25.5	24.5	25.0	17.0	14.5	16.0	13.5	11.5	12.5			
20	25.5	24.0	24.5	17.0	15.0	16.0	13.5	13.5	13.5			
21	25.5	23.5	24.5	18.0	16.0	17.0	---	---	---			
22	25.5	23.5	24.5	18.5	16.5	17.5	---	---	---			
23	24.5	23.0	23.5	17.5	16.0	16.5	---	---	---			
24	23.5	22.5	23.0	17.0	14.0	16.0	---	---	---			
25	23.5	22.0	23.0	17.5	14.5	16.0	---	---	---			
26	24.5	22.0	23.5	17.0	14.0	16.0	---	---	---			
27	25.0	21.5	23.0	17.0	14.0	15.5	---	---	---			
28	25.0	21.5	23.5	16.0	13.5	15.0	---	---	---			
29	24.5	21.0	23.0	16.5	13.5	15.0	---	---	---			
30	25.0	22.0	23.5	17.5	14.0	16.0	---	---	---			
31	23.5	21.0	22.5	---	---	---	---	---	---			
MONTH	30.5	21.0	26.0	23.5	13.5	18.5	---	---	---			

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	17.5	16.0	17.0	---	---	---	24.0	21.0	22.0
2	---	---	---	17.5	15.0	16.5	---	---	---	24.0	19.5	21.5
3	---	---	---	18.0	15.5	16.5	---	---	---	25.0	20.5	23.0
4	---	---	---	19.0	16.0	17.5	---	---	---	26.5	22.0	24.0
5	---	---	---	20.0	17.0	18.5	---	---	---	28.0	24.5	25.5
6	---	---	---	21.0	18.0	19.5	---	---	---	24.5	21.0	23.0
7	---	---	---	22.0	19.0	20.5	---	---	---	23.5	19.5	21.5
8	---	---	---	22.5	20.5	21.5	---	---	---	21.5	19.0	20.0
9	---	---	---	---	---	---	---	---	---	22.5	18.5	20.0
10	---	---	---	---	---	---	---	---	---	23.5	18.5	20.5
11	---	---	---	---	---	---	---	---	---	25.0	19.5	22.0
12	---	---	---	---	---	---	---	---	---	26.0	20.0	23.0
13	---	---	---	---	---	---	---	---	---	27.0	21.0	24.0
14	---	---	---	---	---	---	---	---	---	28.0	23.0	25.5
15	---	---	---	---	---	---	---	---	---	28.0	24.5	26.0
16	---	---	---	---	---	---	---	---	---	28.0	24.0	25.5
17	---	---	---	---	---	---	---	---	---	28.0	24.0	26.0
18	---	---	---	---	---	---	---	---	---	27.5	24.0	25.5
19	---	---	---	---	---	---	---	---	---	27.5	24.0	25.5
20	---	---	---	---	---	---	---	---	---	27.5	24.0	25.5
21	18.0	16.0	17.0	---	---	---	---	---	---	28.5	24.0	26.0
22	17.5	15.0	16.5	---	---	---	---	---	---	29.5	25.5	27.5
23	17.0	15.0	16.0	---	---	---	---	---	---	29.0	27.0	28.0
24	16.5	15.0	16.0	---	---	---	24.5	24.0	24.5	29.0	26.5	27.5
25	17.5	15.0	16.0	---	---	---	26.0	23.0	24.5	27.5	24.5	26.0
26	17.5	15.0	16.5	---	---	---	26.5	23.5	25.0	29.0	25.0	27.0
27	18.0	15.0	16.5	---	---	---	25.0	21.5	23.5	28.5	26.0	27.0
28	18.0	15.5	17.0	---	---	---	26.0	22.0	24.0	29.0	25.5	27.0
29	---	---	---	---	---	---	26.5	22.5	24.5	29.0	26.0	27.5
30	---	---	---	---	---	---	26.5	23.5	25.0	29.5	26.5	28.0
31	---	---	---	---	---	---	---	---	---	---	27.0	29.5
MONTH	---	---	---	---	---	---	---	---	---	29.5	18.5	25.0

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	30.0	26.5	28.0	31.5	28.0	29.5				---	---	---
2	30.0	26.0	28.0	30.5	27.0	28.5				---	---	---
3	30.0	26.0	28.0	30.0	26.0	28.0				---	---	---
4	30.5	26.5	28.5	30.0	27.5	28.5				---	---	---
5	30.5	27.5	29.0	30.0	27.0	28.0				---	---	---
6	31.0	28.0	29.0	29.0	26.0	27.0				33.0	31.5	32.0
7	30.5	27.0	28.5	30.5	27.0	28.5				33.5	30.0	31.5
8	29.0	26.5	27.5	30.5	28.0	29.0				33.5	30.0	32.0
9	29.0	25.5	27.0	31.5	28.5	29.5				33.5	30.5	32.0
10	29.0	26.0	27.5	31.0	28.5	29.5				33.5	30.0	32.0
11	30.0	26.0	28.0	30.5	28.0	29.0				33.0	30.0	31.5
12	31.5	28.0	29.5	31.0	28.5	29.5				33.5	30.0	32.0
13	32.5	29.0	30.0	30.5	28.5	29.5				33.5	30.5	31.5
14	32.0	28.5	29.5	31.0	28.0	29.5				33.0	29.5	31.0
15	31.0	27.5	29.0	31.5	28.5	30.0				32.0	29.5	30.5
16	29.5	26.0	27.5	33.0	28.5	30.5				30.5	28.0	29.5
17	28.0	24.0	26.0	33.0	29.0	30.5				31.0	27.5	29.5
18	26.5	22.0	24.0	---	---	---				31.0	28.0	29.5
19	28.0	23.0	25.5	---	---	---				31.0	28.5	29.5
20	29.0	25.0	27.0	---	---	---				31.0	28.5	29.5
21	30.0	25.5	27.5	---	---	---				30.5	28.0	29.5
22	30.5	26.5	28.5	---	---	---				31.0	28.0	29.5
23	30.5	27.5	29.0	---	---	---				31.0	28.5	29.5
24	31.0	28.0	29.0	---	---	---				30.5	28.5	29.5
25	31.0	27.5	29.5	---	---	---				31.0	28.5	29.5
26	31.5	28.5	30.0	---	---	---				30.5	28.0	29.5
27	32.0	29.5	30.5	---	---	---				30.5	28.5	29.5
28	33.0	29.5	31.0	---	---	---				29.5	28.5	29.0
29	33.0	29.5	31.0	---	---	---				30.0	27.5	29.0
30	32.0	29.0	30.5	---	---	---				30.0	27.5	29.0
31	---	---	---	---	---	---				---	---	---
MONTH	33.0	22.0	28.5	---	---	---				33.5	27.5	30.5
YEAR	33.5	10.0	24.0									

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 14...	0945	100	16.0	76	76
DEC 08...	1900	120	13.0	88	87
FEB 21...	1130	160	16.5	41	96
APR 24...	1300	189	25.0	56	41
MAY 31...	0815	105	27.0	294	16
JUN 20...	1000	109	26.0	402	48
JUL 17...	1745	333	33.0	495	30
AUG 14...	0800	309	29.0	836	34
SEP 12...	0730	170	30.5	248	90

10255550 NEW RIVER NEAR WESTMORLAND, CA

LOCATION.--Lat 33°06'17", long 115°39'49", in SW¼SW¼SW¼ sec.19, T.12 S., R.13 E., Imperial County, Hydrologic Unit 18100200, on right bank 3.5 mi (5.6 km) upstream from mouth, and 5.2 mi (8.4 km) northwest of Westmorland.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1943 to current year. Monthly discharge only for January 1943 to September 1960, published in WSP 1734.

GAGE.--Water-stage recorder. Altitude of gage is -220 ft (-67 m), from topographic map.

REMARKS.--Records good. Discharge represents seepage and return flow from irrigated areas.

COOPERATION.--Records were furnished by Imperial Irrigation District and reviewed by the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,000 ft³/s (85 m³/s) Aug. 17-18, 1977, estimated by Imperial Irrigation District; minimum daily, 293 ft³/s (8.30 m³/s) Jan. 6, 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	570	449	427	442	455	605	726	776	625	812	655	591
2	553	446	435	388	477	645	787	764	617	819	670	581
3	574	470	457	415	466	641	789	791	626	808	636	597
4	590	492	429	443	470	667	787	781	630	772	636	623
5	590	534	443	507	475	700	795	772	643	784	638	627
6	607	551	466	511	480	683	793	772	685	752	677	617
7	645	543	463	477	496	664	808	726	685	774	675	639
8	607	536	498	444	502	671	816	738	636	816	667	662
9	590	530	496	444	517	668	812	714	628	845	649	656
10	582	494	494	444	502	662	789	689	640	876	649	613
11	523	505	479	448	516	659	746	676	683	862	657	645
12	498	502	502	477	506	655	779	693	742	872	710	627
13	519	466	517	483	545	619	776	689	734	855	825	613
14	511	472	532	473	547	584	760	664	726	887	824	613
15	585	505	532	466	590	604	779	638	728	826	740	652
16	526	513	536	488	553	553	789	636	720	785	754	605
17	555	505	672	528	557	582	766	679	710	760	714	593
18	547	517	726	526	536	622	726	662	706	744	664	631
19	549	530	580	511	536	667	740	679	645	779	630	601
20	528	519	540	498	551	738	726	660	566	832	632	605
21	630	530	505	461	582	659	783	700	576	870	633	637
22	834	540	490	433	580	617	793	726	576	891	635	623
23	716	538	481	448	603	574	820	726	617	872	656	625
24	649	576	470	435	632	613	789	674	626	861	662	631
25	566	603	466	463	630	636	766	691	676	787	681	643
26	525	596	498	487	647	628	742	762	722	751	654	625
27	461	525	485	477	622	626	766	655	756	776	654	611
28	461	463	478	496	582	661	716	609	793	781	637	583
29	448	455	479	459	---	679	720	596	832	787	597	635
30	455	427	451	457	---	703	756	576	826	783	654	637
31	461	---	481	425	---	708	---	607	---	706	655	---
TOTAL	17469	15360	15490	14469	15151	19925	23070	21459	20344	25050	20742	18649
MEAN	564	511	500	467	541	643	769	692	678	808	669	622
MAX	834	603	726	528	647	738	820	791	832	891	824	662
MIN	448	427	427	388	455	553	716	576	566	706	597	581
AC-FT	34650	30460	30740	28700	30050	39520	45760	42564	40350	49690	41140	36990

CAL YR 1978 TOTAL 198197 MEAN 543 MAX 834 MIN 352 AC-FT 393000
WTR YR 1979 TOTAL 227176 MEAN 622 MAX 891 MIN 388 AC-FT 450600

10255550 NEW RIVER NEAR WESTMORLAND, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: October 1963 to September 1964, water year 1967 (partial-record station), August 1969 to June 1971, August 1975 to current year.

COOPERATION.--Discharges were furnished by Imperial Irrigation District.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
25...	1300	911	--	--	--	--	--	--	--	--
NOV										
28...	1635	612	5800	7.9	15.5	--	--	920	680	170
MAR										
20...	1420	619	5150	7.8	20.0	7.0	51	--	--	--
20...	1345	619	5750	7.6	19.5	--	--	1000	800	230
APR										
25...	0840	712	--	--	--	--	--	--	--	--
MAY										
30...	0830	618	4700	7.8	23.0	4.8	48	1000	800	230
JUN										
19...	1115	617	--	--	--	--	--	--	--	--
JUL										
19...	0915	710	4010	7.4	30.0	--	--	780	580	180

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	SODIUM+POTAS-SIUM DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT										
25...	--	--	--	--	--	--	--	--	--	--
NOV										
28...	120	1000	72	17	--	79	240	980	1700	.7
MAR										
20...	--	--	--	--	--	--	--	--	--	--
20...	110	840	63	11	--	44	230	870	1300	.6
APR										
25...	--	--	--	--	--	--	--	--	--	--
MAY										
30...	110	820	63	11	850	38	230	860	1200	.6
JUN										
19...	--	--	--	--	--	--	--	--	--	--
JUL										
19...	80	600	73	9.4	630	28	200	800	880	.6

10255550 NEW RIVER NEAR WESTMORLAND, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT 25...	--	--	--	--	--	--	--	--	--	--
NOV 28...	18	4448	4.5	.76	.98	.94	1.7	--	.17	.14
MAR 26...	--	--	--	--	--	--	--	--	--	--
28...	14	3578	4.7	2.0	2.6	.90	2.9	7.6	.31	.31
APR 25...	--	--	--	--	--	--	--	--	--	--
MAY 30...	15	3428	3.4	.97	1.3	1.0	2.0	5.4	.35	.16
JUN 19...	--	--	--	--	--	--	--	--	--	--
JUL 19...	16	2728	3.1	1.0	1.3	.90	1.9	5.0	.260	.19

DATE	TIME	ANTI-MONY, TOTAL (UG/L AS SB)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)
NOV 28...	1635	--	8	--	100	1900	0	--	--	10
MAR 26...	1420	0	--	100	--	--	--	0	16	--
28...	1345	--	--	--	--	1400	--	--	--	--
MAY 30...	0830	3	--	300	--	1300	--	21	28	--
JUL 19...	0915	--	--	--	--	960	--	--	--	--

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 28...	20	0	1000	170	--	--	110	4900	30
MAR 26...	--	--	--	--	.0	5	--	--	--
28...	30	--	--	--	--	--	--	--	--
MAY 30...	40	--	--	--	.2	14	--	--	--
JUL 19...	20	--	--	--	--	--	--	--	--

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	NAPH-THA-LENES, POLY-CHLOR, TOTAL (UG/L)	PHENOLS (UG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)	TANNIN AND LIGNIN (MG/L)	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV 28...	1635	--	--	.00	--	--	--	--	.0	--
MAR 26...	1420	12	.01	--	0	.50	0	.6	.0	--
28...	1345	--	--	--	--	--	--	--	.0	--
MAY 30...	0830	22	.00	--	2	.40	1	.0	.1	3

10255550 NEW RIVER NEAR WESTMORLAND, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ATRA-ZINE, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL (UG/L)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV												
28...	1635	.00	.00	--	.0	--	.01	--	.01	--	.01	--
MAR												
26...	1420	--	.00	--	.0	--	.01	--	.01	--	.00	--
28...	1345	.00	.00	--	.0	--	.01	--	.01	--	.00	--
MAY												
30...	0830	.00	.01	.0	.0	4	.02	4.7	.01	9.8	.01	11

DATE	DI-AZINON, TOTAL (UG/L)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN TOTAL (UG/L)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)
NOV												
28...	.01	--	.00	--	.01	.00	--	.00	--	.00	--	.00
MAR												
26...	.00	--	.01	--	.00	.00	--	.00	--	.00	--	.00
28...	.04	--	.01	--	.00	.00	--	.00	--	.00	--	.00
MAY												
30...	.00	.0	.01	1.1	.01	.00	.1	.00	.0	.00	.0	.00

DATE	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL (UG/L)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METHYL PARA-THION, TOTAL (UG/L)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI-THION, TOTAL (UG/L)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV												
28...	--	.00	--	.00	--	.00	--	.00	--	.00	.00	--
MAR												
26...	--	.01	--	.18	--	.00	--	.00	--	.00	.00	--
28...	--	.01	--	.33	--	.00	--	.00	--	.00	.00	--
MAY												
30...	.0	.00	.0	.01	.0	.00	.0	.00	.0	.00	.00	.0

DATE	PER-THANE TOTAL (UG/L)	PHOS-DRIN, TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	SIMA-ZINE TOTAL (UG/L)	SIME-TRYNE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)
NOV											
28...	.00	.00	.01	--	--	0	--	.00	--	.23	.00
MAR											
26...	.00	--	.09	--	--	0	--	.00	--	.20	.00
28...	.00	.01	.09	--	--	0	--	.00	--	.43	.00
MAY											
30...	.00	.00	.00	.0	.0	0	0	.00	.0	.00	.00

10255700 SAN FELIPE CREEK NEAR JULIAN, CA

LOCATION.--Lat 33°07'07", long 116°26'04", in NW¼NE¼ sec.23, T.12 S., R.5 E., San Diego County, Hydrologic Unit 18100200, in Anza-Borrego Desert State Park, on left bank under bridge on State Highway 78 in Sentenac Canyon, 1.0 mi (1.6 km) upstream from Grapevine Canyon, and 10 mi (16 km) northeast of Julian.

DRAINAGE AREA.--89.2 mi² (231.0 km²).

PERIOD OF RECORD.--August 1958 to current year.

GAGE.--Water-stage recorder and concrete low-water control. Datum of gage is 1,872.69 ft (570.796 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--21 years, 0.29 ft³/s (0.008 m³/s), 207 acre-ft/yr (255,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft³/s (29.7 m³/s) Aug. 22, 1967, gage height, 4.08 ft (1.244 m), from rating curve extended above 12 ft³/s (0.34 m³/s) on basis of slope-area measurement at gage height 3.50 ft (1.067 m); no flow for many days in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 94 ft³/s (2.66 m³/s) Mar. 28 (1900 hrs), gage height, 2.42 ft (0.738 m), no other peak above base of 50 ft³/s (1.42 m³/s); minimum daily, no flow many months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.23	.14	4.2	1.1	1.2	.72	.30	0		
2		0	.25	.16	3.0	1.2	1.3	.76	.30	0		
3		0	.21	.16	2.1	.91	1.1	.77	.35	0		
4		0	.23	.13	.92	.91	1.1	.71	.27	0		
5		0	.23	.30	.72	.87	1.0	.69	.20	0		
6		0	.25	1.5	.63	.86	.91	.69	.17	0		
7		0	.23	.34	.60	.86	.82	.73	.16	0		
8		0	.20	.22	.63	.87	.87	.83	.21	0		
9		0	.20	.19	.58	.82	.90	.80	.19	0		
10		0	.23	.15	.56	.82	.96	.77	.17	0		
11		0	.23	.15	.63	.80	.94	.64	.18	0		
12		0	.23	.16	.67	.80	.93	.53	.13	0		
13		0	.23	.13	.65	.71	.87	.44	.12	0		
14		0	.19	.14	.64	.72	.85	.42	.08	0		
15		0	.19	.16	.74	.72	.80	.34	.02	0		
16		0	.19	1.2	.76	.72	.80	.40	.02	0		
17		0	3.0	2.3	.74	1.1	.81	.42	.07	0		
18		0	2.1	.70	.60	.91	.86	.42	.21	0		
19		.06	3.9	.42	.56	.87	.84	.41	.21	0		
20		.12	.70	.26	.53	2.4	.82	.70	.13	1.2		
21		.14	.35	.27	.98	2.1	.81	.54	.09	.16		
22		.16	.29	.26	.82	5.5	.75	.42	.06	.07		
23		.16	.27	.23	1.4	2.3	.72	.34	.05	.01		
24		3.2	.25	.26	2.9	1.9	.72	.34	.05	0		
25		.52	.20	.63	1.3	1.3	.71	.33	.03	0		
26		.23	.20	.61	1.2	1.1	.71	.30	.01	0		
27		.20	.20	.30	1.0	1.1	.70	.44	0	0		
28		.19	.23	.37	.90	31	.68	.35	0	0		
29		.19	.21	.48	---	25	.66	.31	0	0		
30		.21	.18	.39	---	8.2	.65	.29	0	0		
31		---	.18	1.7	---	2.3	---	.25	---	0		---
TOTAL	0	5.38	15.84	14.58	30.97	100.75	25.72	16.41	3.72	1.44	0	0
MEAN	0	.18	.51	.47	1.11	3.25	.86	.53	.12	.047	0	0
MAX	0	3.2	3.9	2.3	4.2	31	1.3	.83	.35	1.2	0	0
MIN	0	0	.18	.13	.53	.71	.66	.25	0	0	0	0
AC-FT	0	11	31	29	61	200	51	33	7.4	2.9	0	0

CAL YR 1978 TOTAL 384.61 MEAN 1.05 MAX 77 MIN 0 AC-FT 763
WTR YR 1979 TOTAL 214.73 MEAN .59 MAX 31 MIN 0 AC-FT 426

10255800 COYOTE CREEK NEAR BORREGO SPRINGS, CA

LOCATION (REVISED).-- Lat 33°22'25", long 116°25'36", in NE¼NE¼NE¼ sec. 23, T.9 S., R.5 E., San Diego County, Hydrologic Unit 18100200, on left bank just upstream from Box Canyon, 2.3 mi (3.7 km) northwest of Rancho De Anza, and 8.7 mi (13.9 km) northwest of Borrego Springs.

DRAINAGE AREA.--144 mi³ (373 km²).

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for October and November 1950, published in WSP 1734.

REVISED RECORDS.--WDR CA-72-1: 1969, 1971.

GAGE.--Water-stage recorder. Altitude of gage is 1,250 ft (381 m), from topographic map. Prior to Mar. 24, 1967, at site 250 ft (76 m) upstream at different datum. Mar. 24, 1967 to Aug. 16, 1977 at site 0.5 mi (0.8 km) downstream at different datum. From Apr. 19, 1978 at present site and datum.

REMARKS.--Records poor. No regulation above station. Diversion about 0.5 mi (0.8 km) upstream for irrigation below station since January 1973. No gage-height record many days.

AVERAGE DISCHARGE.--29 years, 1.88 ft³/s (0.053 m³/s), 1,360 acre-ft/yr (1.68 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,840 ft³/s (109 m³/s) Aug. 17, 1977, gage height unknown, on basis of slope-area measurement of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.42 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
July 20	Unknown	120	3.40	4.30	1.311
Aug. 16	1815	*520	14.7	7.20	2.195

Minimum daily discharge, 0.71 ft³/s (0.020 m³/s) July 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.3	1.6	2.5	2.2	1.9	2.7	1.9	1.3	.82	2.3	1.8
2	1.1	1.3	1.6	2.7	7.0	2.0	2.5	1.9	1.4	.92	2.3	1.8
3	1.1	1.2	1.6	2.7	2.3	1.9	2.4	1.9	1.3	.92	2.5	1.8
4	1.1	1.3	1.6	2.9	2.2	1.9	2.3	1.9	1.3	.92	2.5	1.8
5	1.1	1.4	1.6	3.3	2.2	1.9	2.3	1.9	1.3	.92	2.7	1.8
6	1.1	1.2	1.6	4.3	2.2	1.9	2.3	1.9	1.3	.82	2.9	1.8
7	1.1	1.2	1.6	3.7	2.3	1.9	2.3	1.9	1.3	.82	2.7	1.8
8	1.1	1.0	1.6	3.4	2.3	1.9	2.2	1.9	1.2	.82	2.7	1.8
9	1.2	1.2	1.7	3.9	2.3	2.0	2.2	1.9	1.2	.71	2.9	1.8
10	1.2	1.3	1.7	4.1	2.2	2.2	2.2	1.9	1.2	.71	2.7	1.8
11	1.2	1.3	1.6	3.4	2.1	2.2	2.2	1.9	1.3	.82	3.1	1.8
12	1.2	1.3	1.7	3.1	2.0	2.0	2.2	1.7	1.3	.92	1.9	1.8
13	1.2	1.4	1.7	2.8	1.9	2.2	2.2	1.7	1.3	1.0	2.0	1.8
14	1.2	1.4	1.7	2.5	1.8	2.2	2.1	1.6	1.2	1.0	2.0	1.8
15	1.2	1.4	1.9	2.3	1.8	2.2	2.1	1.7	1.2	1.0	5.0	1.8
16	1.2	1.4	1.7	2.3	1.8	2.2	2.1	1.7	1.2	1.0	300	1.8
17	1.2	1.4	2.3	4.3	1.7	2.2	2.1	1.7	1.4	1.0	50	1.8
18	1.2	1.4	3.0	3.7	1.7	2.2	2.1	1.7	1.6	1.1	10	1.8
19	1.2	1.4	5.5	2.0	1.7	2.2	2.1	2.0	1.4	1.2	6.0	1.8
20	1.2	1.5	2.3	2.0	1.7	2.3	2.0	1.9	1.6	30	5.0	1.8
21	1.2	1.6	2.2	1.9	1.7	2.2	2.0	2.0	1.3	2.5	4.0	1.9
22	1.2	1.6	2.2	1.9	1.7	2.2	2.0	1.9	1.3	2.0	3.0	1.9
23	1.3	1.7	2.1	1.9	1.7	2.2	2.0	1.9	1.3	1.8	2.6	1.9
24	1.3	6.0	2.0	1.9	1.7	2.2	2.0	1.7	1.0	1.6	2.4	1.9
25	1.3	4.0	2.0	1.9	1.7	2.0	2.0	1.7	1.0	1.9	2.2	1.9
26	1.3	2.5	2.3	1.9	1.7	2.0	2.0	1.7	1.0	2.3	2.1	1.9
27	1.3	2.2	2.0	2.0	1.9	2.2	2.0	1.6	.92	2.3	2.0	1.9
28	1.3	1.9	2.3	2.0	1.9	9.3	2.0	1.4	.92	1.9	1.9	1.9
29	1.3	1.8	2.2	1.9	---	2.6	1.9	1.4	.92	2.0	1.8	1.9
30	1.3	1.7	2.5	2.0	---	4.0	1.9	1.4	.82	2.5	1.8	1.9
31	1.3	---	2.5	3.1	---	3.0	---	1.4	---	2.5	1.8	---
TOTAL	37.3	51.3	63.9	84.3	59.4	75.3	64.4	54.7	36.78	70.72	436.8	55.0
MEAN	1.20	1.71	2.06	2.72	2.12	2.43	2.15	1.76	1.23	2.28	14.1	1.83
MAX	1.3	6.0	5.5	4.3	7.0	9.3	2.7	2.0	1.6	30	300	1.9
MIN	1.1	1.0	1.6	1.9	1.7	1.9	1.9	1.4	.82	.71	1.8	1.8
AC-FT	74	102	127	167	118	149	128	108	73	140	866	109

CAL YR 1978 TOTAL 914.63 MEAN 2.51 MAX 67 MIN .25 AC-FT 1810
WTR YR 1979 TOTAL 1089.90 MEAN 2.99 MAX 300 MIN .71 AC-FT 2160

10255810 BORREGO PALM CREEK NEAR BORREGO SPRINGS, CA

LOCATION.--Lat 33°16'44", long 116°25'45", in Anza-Borrego Desert State Park, San Diego County, Hydrologic Unit 18100200, on left bank 3.3 mi (5.3 km) northwest of Borrego Springs.

DRAINAGE AREA.--21.8 mi^2 (56.5 km^2).

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1960, published as "Palm Canyon Creek near Borrego Springs." Monthly discharge only for October to November 1950, published in WSP 1734.

GAGE.--Water-stage recorder. Altitude of gage is 1,200 ft (366 m), from topographic map.

REMARKS.--Records poor. No regulation or diversion above station.

AVERAGE DISCHARGE.--29 years, 0.44 ft^3/s (0.012 m^3/s), 319 acre-ft/yr (393,300 m^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,640 ft^3/s (74.8 m^3/s) Aug. 16, 1979, gage height, 9.8 ft (2.99 m) from floodmarks, on basis of slope-area measurement of peak flow; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15.0 ft^3/s (0.42 m^3/s) and maximum (*), on basis of slope-area measurement of peak flow:

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 19	0630	25	0.71	2.26	0.689	Mar. 28	Unknown	41	1.16	2.44	0.744
Jan. 18	1130	47	1.33	2.50	0.762	July 20	0445	1,180	33.4	5.60	1.707
Feb. 25	Unknown	20	0.57	2.19	0.667	Aug. 16	Unknown	*2,640	74.8	9.80	2.987
Mar. 1	1615	15	0.42	2.11	0.643						

Minimum daily discharge, no flow Oct. 1 to Nov. 18, July 13 to 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.18	.17	10	9.7	8.0	2.3	.64	.05	.11	.30
2		0	.18	.11	10	8.6	6.9	2.4	.82	.05	.08	.32
3		0	.16	.14	9.7	7.2	6.6	1.9	.73	.05	.08	.87
4		0	.17	.14	8.2	6.9	6.0	1.6	.64	.05	.08	.69
5		0	.18	.28	6.9	6.3	5.5	1.5	.46	.05	.11	.64
6		0	.18	3.9	7.5	6.0	5.2	1.8	.39	.04	.08	.63
7		0	.14	1.9	7.9	6.0	5.2	2.1	.33	.03	.33	.71
8		0	.14	.73	7.6	5.8	5.0	2.3	.46	.04	.28	.68
9		0	.14	.73	6.6	5.5	5.0	2.4	.33	.03	.08	.60
10		0	.17	.33	5.0	5.0	5.0	1.9	.22	.01	.08	.59
11		0	.17	.28	4.2	5.0	4.5	1.6	.17	.01	.11	.57
12		0	.22	.28	4.3	4.7	4.0	1.5	.14	.01	6.3	.61
13		0	.17	.17	4.5	4.7	3.8	1.4	.11	0	4.7	.63
14		0	.22	.14	4.5	4.3	4.0	1.3	.05	0	1.5	.61
15		0	.22	.28	4.6	4.0	3.6	1.3	.04	0	.93	.47
16		0	.22	2.5	4.9	4.0	3.6	1.3	.04	0	277	.47
17		0	5.5	11	5.0	4.5	3.6	1.1	.28	0	20	.51
18		0	7.9	14	4.9	4.5	3.6	1.1	.55	0	6.0	.49
19		.02	16	9.3	4.4	5.2	3.2	1.4	.55	0	2.6	.46
20		.09	5.2	6.0	3.6	6.3	3.0	1.6	.28	116	1.5	.45
21		.11	3.2	4.5	4.5	7.5	3.0	1.5	.28	15	1.0	.43
22		.12	2.6	3.4	6.0	7.8	2.8	1.1	.17	4.7	.84	.36
23		.70	2.1	2.4	5.6	7.5	2.6	1.0	.14	1.3	.80	.37
24		.50	1.5	2.6	9.0	5.6	2.4	.82	.14	.22	.70	.48
25		.24	1.4	3.4	11	5.1	2.4	.93	.11	.17	.66	.43
26		.16	.82	1.5	8.4	5.1	2.3	1.1	.08	.14	.62	.36
27		.15	.73	2.3	6.9	5.1	2.1	1.1	.07	.11	.60	.36
28		.14	.73	2.4	6.9	16	1.9	1.0	.08	.09	.58	.43
29		.15	.73	2.1	---	12	1.9	.82	.07	.08	.55	.51
30		.17	.55	2.0	---	10	1.9	.73	.05	.07	.33	.51
31		---	.28	5.2	---	9.0	---	.73	---	.06	.32	---
TOTAL	0	2.55	52.10	84.18	182.6	204.9	118.6	44.63	8.42	138.36	328.95	15.54
MEAN	0	.085	1.68	2.72	6.52	6.61	3.95	1.44	.28	4.46	10.6	.52
MAX	0	.70	16	14	11	16	8.0	2.4	.82	116	277	.87
MIN	0	0	.14	.11	3.6	4.0	1.9	.73	.04	0	.08	.30
AC-FT	0	5.1	103	167	362	406	235	89	17	274	652	31

CAL YR 1978 TOTAL 388.08 MEAN 1.06 MAX 44 MIN 0 AC-FT 770
WTR YR 1979 TOTAL 1180.83 MEAN 3.26 MAX 277 MIN 0 AC-FT 2340

10255850 VALLECITO CREEK NEAR JULIAN, CA

LOCATION.--Lat 32°59'10", long 116°25'10", in SW¼NE¼ sec.1, T.14 S., R.5 E., San Diego County, Hydrologic Unit 18100200, on right bank 0.2 mi (0.3 km) downstream from Cottonwood Wash, and 12.6 mi (20.3 km) southeast of Julian.

DRAINAGE AREA.--39.7 mi² (102.8 km²).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,950 ft (594 m), from topographic map.

REMARKS.--Records fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--16 years, 0.12 ft³/s (0.003 m³/s), 88 acre-ft/yr (109,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,160 ft³/s (32.9 m³/s) Sept. 10, 1976, gage height, 6.30 ft (1.920 m), from high-water mark in well, from rating curve extended above 0.10 ft³/s (0.003 m³/s) on basis of slope-area study of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 0.31 ft³/s (0.009 m³/s) Aug. 16, gage height, 2.99 ft (0.911 m), no peak above base of 15 ft³/s (0.43 m³/s); minimum daily, 0.01 ft³/s (<0.001 m³/s) many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.03	.04	.03	.06	.05	.03	.04	.02	.01	.01	.01
2	.06	.03	.04	.03	.05	.03	.03	.05	.02	.01	.01	.01
3	.07	.03	.04	.03	.05	.03	.03	.05	.02	.01	.01	.01
4	.04	.03	.04	.04	.04	.04	.03	.05	.02	.01	.01	.01
5	.03	.03	.04	.04	.04	.04	.04	.04	.03	.01	.01	.01
6	.03	.03	.04	.04	.04	.04	.04	.03	.02	.01	.01	.01
7	.03	.03	.03	.03	.06	.05	.04	.04	.02	.01	.01	.01
8	.03	.03	.03	.05	.06	.05	.04	.04	.02	.01	.01	.01
9	.03	.03	.04	.04	.06	.04	.05	.04	.02	.01	.01	.01
10	.03	.03	.03	.04	.06	.05	.05	.04	.02	.01	.01	.01
11	.03	.03	.04	# .05	.05	.05	.05	.04	.01	.01	.01	.01
12	.03	.03	.04	.04	.06	.06	.05	.03	.01	.01	.01	.01
13	.03	.03	.04	.05	.05	.05	.05	.03	.01	.01	.01	.01
14	.03	.03	.05	.05	.06	.05	.05	.02	.01	.01	.01	.01
15	.03	.03	.05	.05	.06	.05	.06	.02	.01	.01	.01	.01
16	.03	.03	.05	.06	.06	.04	.07	.02	.01	.01	.02	.01
17	.03	.03	.06	.06	.05	.04	.07	.02	.01	.01	.01	.01
18	.03	.04	.04	.05	.05	.03	.06	.02	.02	.01	.01	.01
19	.03	.04	.03	.04	.06	.04	.06	.02	.02	.01	.01	.01
20	.03	.05	.02	.04	.08	.05	.06	.02	.02	.01	.01	.01
21	.04	.05	.02	.04	.07	.04	.06	.02	.02	.01	.01	.01
22	.03	.05	.02	.03	.05	.04	.06	.02	.02	.01	.01	.01
23	.03	.06	.02	.03	.05	.04	.06	.02	.01	.01	.01	.01
24	.03	.05	.03	.03	.05	.04	.05	.03	.01	.01	.01	.01
25	.03	.04	.02	.04	.05	.05	.05	.03	.01	.01	.01	.01
26	.03	.04	.02	.04	.05	.05	.06	.02	.01	.01	.01	.01
27	.03	.04	.02	.04	.05	.06	.05	.02	.01	.01	.01	.01
28	.03	.04	.02	.04	.05	.05	.05	.02	.01	.01	.01	.01
29	.03	.04	.02	.04	---	.04	.04	.03	.01	.01	.01	.01
30	.03	.04	.03	.05	---	.03	.04	.03	.01	.01	.01	.01
31	.03	---	.03	.06	---	.03	---	.03	---	.01	.01	---
TOTAL	1.05	1.09	1.04	1.30	1.52	1.35	1.48	.93	.46	.31	.32	.30
MEAN	.034	.036	.034	.042	.054	.044	.049	.030	.015	.010	.010	.010
MAX	.07	.06	.06	.06	.08	.06	.07	.05	.03	.01	.02	.01
MIN	.03	.03	.02	.03	.04	.03	.03	.02	.01	.01	.01	.01
AC-FT	2.1	2.2	2.1	2.6	3.0	2.7	2.9	1.8	.9	.6	.6	.6

CAL YR 1978 TOTAL 15.90 MEAN .044 MAX .16 MIN .02 AC-FT 32
WTR YR 1979 TOTAL 11.15 MEAN .031 MAX .08 MIN .01 AC-FT 22

10255885 SAN FELIPE CREEK NEAR WESTMORLAND, CA

LOCATION.--Lat 33°07'25", long 115°51'08", in NW¼SW¼ sec.17, T.12 S., R.11 E., Imperial County, Hydrologic Unit 18100200, on left bank 320 ft (98 m) downstream from State Highway 86, and 14.6 mi (23.5 km) northwest of Westmorland.

DRAINAGE AREA.--1,693 mi^2 (4,385 km^2).

PERIOD OF RECORD.--December 1960 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is -190 ft (-58 m), from topographic map.

REMARKS.--Records poor. No regulation above station. Diversion and pumping for domestic use and irrigation in Borrego Valley 25 mi (40 km) upstream.

AVERAGE DISCHARGE.--18 years (water years 1962-79) 7.49 ft^3/s (0.212 m^3/s), 5,430 acre-ft/yr (6.70 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 100,000 ft^3/s (2,830 m^3/s) Sept. 10, 1976, gage height, 19.0 ft (5.79 m), from rating curve extended above 500 ft^3/s (14.2 m^3/s) on basis of contracted-opening measurement combined with road overflow at peak gage height; no flow for some months in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft^3/s (5.66 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 21	0045	3,970	112	9.15	2.789	July 20	1400	*5,480	155	9.88	3.011
Nov. 24	2130	194	5.49	5.73	1.747	Aug. 13	0830	2,000	56.6	8.35	2.545
Jan. 17	0800	255	7.22	5.91	1.801	Sept. 13	2115	2,090	59.2	8.30	2.530

Minimum daily discharge, no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.10	.20	0	86	0				0	0	0
2	0	0	.20	0	20	0				0	0	0
3	0	0	.10	0	6.0	0				0	0	0
4	0	0	.10	0	2.5	0				0	0	0
5	0	0	.05	.09	.60	0				0	0	0
6	0	0	.01	1.0	.60	0				0	0	0
7	0	0	0	.20	.60	0				0	0	0
8	0	0	0	.10	.50	0				0	0	0
9	0	0	0	.10	.50	0				0	0	0
10	0	0	0	.05	.40	0				0	0	0
11	0	0	0	.02	.40	0				0	0	0
12	0	0	0	0	.40	0				0	0	0
13	0	0	0	0	.40	0				0	216	109
14	0	0	0	0	.40	0				0	2.0	4.8
15	0	0	0	0	.40	0				0	.80	0
16	0	0	0	61	.30	0				0	.40	0
17	0	0	.20	174	.30	0				0	.20	0
18	0	0	.60	10	.30	0				0	.10	0
19	0	0	.30	3.0	.30	0				0	.10	0
20	201	0	0	1.6	.30	1.2				905	0	0
21	687	0	.50	.40	.30	.17				7.3	0	0
22	20	0	.40	.40	.10	0				0	0	0
23	2.5	0	.30	.40	0	0				0	0	0
24	1.0	60	.25	.30	0	0				0	0	0
25	.20	85	.20	.30	0	0				0	0	0
26	.20	10	.10	.30	0	0				0	0	0
27	.20	3.5	.05	.30	0	0				0	0	0
28	.40	1.6	0	.20	0	0				0	0	0
29	.30	.20	0	.20	---	0				0	0	0
30	.20	.20	0	.20	---	0				0	0	0
31	.20	---	0	.20	---	0	---		---	0	0	---
TOTAL	913.20	160.60	3.56	254.36	121.60	1.37	0	0	0	912.3	219.60	113.8
MEAN	29.5	5.35	.11	8.21	4.34	.044	0	0	0	29.4	7.08	3.79
MAX	687	85	.60	174	86	1.2	0	0	0	905	216	109
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	1810	319	7.1	505	241	2.7	0	0	0	1810	436	226

CAL YR 1978 TOTAL 1451.29 MEAN 3.98 MAX 687 MIN 0 AC-FT 2880
WTR YR 1979 TOTAL 2700.39 MEAN 7.40 MAX 905 MIN 0 AC-FT 5360

10256000 WHITEWATER RIVER AT WHITE WATER, CA

LOCATION.--Lat 33°56'48", long 116°38'24", in NW¼NW¼NE¼ sec.2, T.3 S., R.3 E., Riverside County, Hydrologic Unit 18100200, on right bank 1.5 mi (2.4 km) north of White Water, and 3.5 mi (5.6 km) upstream from San Gorgonio River.
DRAINAGE AREA.--57.5 mi² (148.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1948 to current year.
GAGE.--Water-stage recorder on river; water-stage recorder and Cipolletti weir on diversion 500 ft (152 m) downstream. Datum of river gage is 1,610 ft (491 m) National Geodetic Vertical Datum of 1929. Feb. 24, 1950, to Sept. 30, 1952, and Apr. 13, 1960, to June 19, 1968, supplementary gages at different sites and datums within 200 ft (61 m) of base gage. Since Aug. 12, 1969, supplementary gage at site 1.5 mi (2.4 km) downstream at different datum.
REMARKS.--Records poor. Stage-discharge relationship indefinite much of year. White Water Mutual Water Company diverts 500 ft (152 m) downstream. Monthly discharge is combined with flow from infiltration line that bypasses station. No regulation above station. Water is diverted out of basin about 15 mi (24 km) upstream to powerplants in San Gorgonio River basin and then to an area north of Banning for irrigation. One small diversion for domestic use and one for irrigation are made 2 to 3 mi (3.2 to 4.8 km) upstream.
COOPERATION.--Records of bypass in infiltration line were furnished by White Water Mutual Water Company; records of diversion, 15 mi (24 km) upstream, were furnished by Southern California Edison Company.
AVERAGE DISCHARGE.--River only: 31 years, 17.4 ft³/s (0.493 m³/s), 12,610 acre-ft/yr (15.5 hm³/yr). Combined river and infiltration line: 30 years (water years 1950-79), 18.8 ft³/s (0.532 m³/s), 13,620 acre-ft/yr (16.8 hm³/yr).
EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 24,000 ft³/s (680 m³/s) Nov. 22, 1965, gage height, 13.60 ft (4.145 m), from rating curve extended above 660 ft³/s (18.7 m³/s) on basis of field estimate of maximum flow; no flow at times in some years.
EXTREMES OUTSIDE PERIOD OF RECORD.--River only: Maximum discharge, 42,000 ft³/s (1,190 m³/s) Mar. 2, 1938, by slope-area measurement of peak flow, at site 2.5 mi (4.0 km) upstream, drainage area, 51.4 mi² (133 km²).
EXTREMES FOR CURRENT YEAR.--River only: Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 18	Unknown	Unknown		Unknown		Aug. 12	0830	183	5.18	6.59	2.009
Mar. 27	1700	*344	9.74	6.86	2.091						

Minimum daily discharge, 15 ft³/s (0.425 m³/s) July 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	32	34	36	39	45	34	43	41	24	24	22
2	31	32	34	36	40	41	33	49	39	25	24	22
3	31	32	33	35	39	38	33	54	36	24	23	20
4	31	32	31	33	38	38	33	50	34	23	24	20
5	31	31	30	42	38	39	33	52	34	21	24	20
6	31	30	29	46	38	39	33	60	34	21	24	20
7	31	30	28	42	38	40	33	53	36	20	24	20
8	31	30	28	40	37	41	33	49	36	19	24	19
9	31	29	28	40	37	43	33	52	35	19	23	20
10	31	30	28	39	37	44	33	56	33	18	23	20
11	31	51	28	39	37	44	34	58	31	18	25	20
12	31	45	27	44	37	44	34	60	27	17	42	20
13	38	38	27	41	38	44	34	60	24	16	31	21
14	31	40	27	40	59	43	35	58	25	16	26	26
15	31	35	26	41	50	43	36	56	28	15	24	25
16	31	34	26	42	44	43	38	56	29	16	27	23
17	31	34	50	44	44	43	40	60	31	17	28	22
18	31	34	128	44	43	41	40	62	33	17	30	22
19	30	34	35	40	42	41	40	66	29	20	28	21
20	35	34	46	37	42	43	40	68	30	47	30	21
21	38	37	44	36	60	40	40	62	28	41	30	21
22	34	40	41	35	45	41	41	57	28	36	31	21
23	35	37	41	34	45	40	40	52	27	30	28	20
24	34	37	41	34	42	38	40	52	26	29	26	20
25	33	36	41	34	41	38	40	53	25	28	25	19
26	33	35	41	32	42	38	41	49	24	30	24	20
27	32	34	41	32	41	121	41	45	24	29	24	19
28	33	33	41	32	40	107	40	42	23	27	24	19
29	32	33	41	30	---	54	39	40	23	29	24	20
30	32	33	38	29	---	41	39	38	23	29	23	20
31	32	---	37	31	---	38	---	39	---	25	22	---
TOTAL	998	1042	1170	1160	1173	1433	1103	1651	896	746	809	623
MEAN	31.9	34.7	37.7	37.4	41.9	46.2	36.8	53.3	29.9	24.1	26.1	20.8
MAX	38	51	128	46	60	121	41	68	41	47	42	26
MIN	30	29	26	29	37	38	33	38	23	15	22	19
AC-FT	1960	2070	2320	2300	2330	2840	2190	3270	1780	1480	1600	1240
a	2010	2120	2370	2350	2360	2890	2240	3320	1830	1530	1650	1290
b	129	162	166	124	38	189	43	305	352	315	311	237
c	241	174	152	68	86	109	194	264	295	349	250	270

CAL YR 1978 TOTAL 24351.0 MEAN 66.7 MAX 340 MIN 5.5 AC-FT 48260 AC-FT a 48790 AC-FT b 1955 AC-FT c 2190
WTR YR 1979 TOTAL 12796.0 MEAN 35.1 MAX 128 MIN 15 AC-FT 25380 AC-FT a 25970 AC-FT b 2371 AC-FT c 2450

a Combined discharge, in acre-feet, of river and infiltration line.
b Discharge, in acre-feet, diverted from basin 15 mi (24 km) upstream.
c Discharge, in acre-feet, diverted by White Water Mutual Water Company 500 ft (152 m) downstream.

10256000 WHITEWATER RIVER AT WHITE WATER, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to current year.
CHEMICAL ANALYSES: Water years 1967 to current year.

COOPERATION.--Chemical-quality records were furnished by California Department of Water Resources.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)
OCT 03...	1030	31	360	7.8	20.5	--	--	160
DEC 12...	0950	27	340	8.6	12.0	0	10.2	160
MAR 21...	1640	40	320	8.8	13.0	1	9.4	150
APR 18...	1020	40	650	8.2	16.5	--	--	236
MAY 17...	1020	60	--	--	20.0	--	--	--
JUN 20...	0840	30	300	8.3	20.0	0	8.5	150
SEP 18...	1730	22	750	8.1	25.5	--	--	257

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT 03...	47	11	12	13	.4	4.2	150	29	2.5
DEC 12...	44	11	13	15	.5	4.0	150	28	3.1
MAR 21...	44	10	12	14	.4	3.0	150	29	2.2
APR 18...	60	21	58	34	1.6	3.9	132	154	48
MAY 17...	--	--	--	--	--	--	--	--	--
JUN 20...	43	10	12	15	.4	3.0	140	28	2.0
SEP 18...	65	23	69	36	1.9	4.6	124	189	56

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)
OCT 03...	1.1	15	--	--	--	--	1.6	.02
DEC 12...	.8	--	184	--	.41	1.8	--	--
MAR 21...	.9	--	192	--	.27	1.2	--	--
APR 18...	.6	15	447	--	--	--	--	--
MAY 17...	--	--	--	--	--	--	--	--
JUN 20...	.8	--	281	--	.27	1.2	--	--
SEP 18...	.6	11	507	494	--	--	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ARSENIC DIS- SOLVED (UG/L AS AS)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 03...	1030	--	40	--	--	10	--	--	--
DEC 12...	0950	--	0	--	--	--	--	--	--
MAR 21...	1640	--	0	--	--	--	--	--	--
APR 18...	1020	--	100	--	--	0	--	--	--
MAY 17...	1020	0	--	10	0	10	0	.0	0
JUN 20...	0840	--	0	--	--	--	--	--	--
SEP 18...	1730	--	0	--	--	30	--	--	--

10256200 SAN GORGONIO RIVER NEAR BANNING, CA

LOCATION.--Lat 33°59'54", long 116°54'29", in SW¼NW¼NW¼ sec.17, T.2S S., R.1 E., Riverside County, Hydrologic Unit 18100200, on right bank 3.7 mi (6.0 km) upstream from Mais Canyon, and 5.3 mi (8.5 km) northwest of Banning.

DRAINAGE AREA.--14.8 mi^2 (38.3 km^2).

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,720 ft (1,130 m), from topographic map.

REMARKS.--Records poor. No regulation above station. Some pumping upstream for irrigation. Floods of 1978 water year caused heavy deposition of boulders at gage resulting in indeterminate stage-discharge relationship. Discharge measurements made during year given in table below.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 432 ft^3/s (12.2 m^3/s) Sept. 11, 1976, gage height, 8.92 ft (2.179 m), from rating curve extended above 35 ft^3/s (0.99 m^3/s) on basis of estimate of maximum flow, may have been exceeded in 1978 water year; no flow long periods some years.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)
Oct. 4	1500	2.4	0.068	June 27	1300	6.9	0.195
Oct. 31	1100	0.01	<0.001	Aug. 7	1305	2.9	0.082
Dec. 5	1145	1.7	0.048	Sept. 12	0705	2.0	0.057
Dec. 28	0830	0.62	0.018				

10256400 SAN GORGONIO RIVER NEAR WHITE WATER, CA

LOCATION.--Lat 33°55'14", long 116°41'45", in NW¼SE¼SW¼ sec.8, T.3 S., R.3 E., Riverside County, Hydrologic Unit 18100200, on right bank 0.2 mi (0.3 km) south of Interstate Highway 10, and 3.4 mi (5.5 km) west of town of White Water.

DRAINAGE AREA.--154 mi^2 (399 km^2).

PERIOD OF RECORD.--February 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,320 ft (402 m), from topographic map. Prior to Mar. 19, 1968, flood-hydrograph recorder.

REMARKS.--Records poor. No regulation or diversion above station. No gage-height record for entire year due to vandalism and indefinite stage-discharge relationship.

AVERAGE DISCHARGE.--12 years (water years 1967-78), 1.30 ft^3/s (0.037 m^3/s), 942 acre-ft/yr (1.16 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,250 ft^3/s (205 m^3/s) Jan. 25, 1969, gage height, 6.0 ft (1.83 m), from floodmarks, on basis of slope-area measurement of maximum flow; no flow most of each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 23, 1965, reached a stage of 6.10 ft (1.859 m), from floodmarks, discharge, 4,500 ft^3/s (127 m^3/s), on basis of slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 695 ft^3/s (19.7 m^3/s) Jan. 5., gage height, 2.86 ft (0.872 m), from area-velocity estimate of peak flow; no flow much of year.

NOTE.--Record for current year will not be published due to lack of data.

10256500 SNOW CREEK NEAR WHITE WATER, CA

LOCATION.--Lat 33°52'14", long 116°40'49", in SE¼NW¼NW¼ sec.33, T.3 S., R.3 E., Riverside County, Hydrologic Unit 18100200, on left bank 300 ft (90 m) upstream from Southern Pacific Railroad diversion dam, 300 ft (90 m) downstream from East Fork, 2.5 mi (4.0 km) upstream from mouth, and 4.4 mi (7.1 km) southwest of White Water.

DRAINAGE AREA.--10.8 mi² (28.0 km²).

PERIOD OF RECORD.--July to December 1921, May 1922 to February 1927, December 1927 to September 1931, October 1959 to current year. Yearly discharge only for 1930, published in WSP 1314.

GAGE.--Water-stage recorder on creek; water-stage recorder and Parshall flume on diversion. Altitude of both gages is 2,000 ft (610 m), from topographic map. Prior to September 1931, at various sites within 500 ft (150 m) of present site at different datums. September 1931 to Oct. 6, 1970, at site 190 ft (58 m) downstream at datum 15.9 ft (4.85 m) lower. Oct. 6, 1970 to Oct. 25, 1978, at site 60 ft (18.3 m) upstream above diversion at same datum. Gage moved to present site 10 ft (3.05 m) downstream of diversion to concrete control Oct. 25, 1978.

REMARKS.--Records good. No regulation above station. Palm Springs Water Co. diverts 10 ft (3.05 m) upstream, generally taking most of the base flow. Total flow is computed by combining discharge records for the diversion and the creek. Discharge records for Snow Creek diversion beginning October 1978 available in the files of the Geological Survey.

AVERAGE DISCHARGE.--Combined creek and diversion: 27 years (water years 1923-26, 1929-31, 1960-79), 8.76 ft³/s (0.248 m³/s), 6,350 acre-ft/yr (7.83 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s (368 m³/s) Jan. 25, 1969, gage height, 27.4 ft (8.35 m), from floodmarks, present datum, from rating curve extended above 55 ft³/s (1.56 m³/s) on basis of slope-area measurement of maximum flow; minimum daily, 2.1 ft³/s (0.059 m³/s) June 23-27, Sept. 5-11, 1961.

EXTREMES FOR CURRENT YEAR.--Combined creek and diversion: Peak discharges above base of 50 ft³/s (1.42 m³/s) and maximum (*) from rating curve extended above 100 ft³/s (2.83 m³/s) on basis of slope-area measurement of maximum flow:

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 18	0215	252	7.14	3.10	0.945	Apr. 27	0315	55	1.56	2.42	0.738
Feb. 21	0600	203	5.75	2.97	0.905	July 20	0400	372	10.5	3.35	1.021
Mar. 28	0345	*671	19.0	3.87	1.180						

Minimum daily discharge, 4.9 ft³/s (0.14 m³/s) Nov. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	5.4	7.5	7.4	10	17	39	36	29	12	8.8	7.2
2	6.2	5.4	10	7.2	9.8	15	34	32	27	12	8.4	6.8
3	6.3	5.4	7.3	7.1	9.7	14	31	33	27	11	8.0	6.8
4	6.2	5.4	6.6	6.5	9.6	14	29	37	27	11	8.0	6.8
5	6.5	5.4	6.3	9.2	9.9	13	28	40	27	11	7.6	6.5
6	6.2	5.3	6.3	16	11	14	27	37	29	11	6.9	6.5
7	6.2	5.1	6.3	12	12	14	27	36	30	10	9.3	6.5
8	6.2	4.9	6.2	11	13	15	27	36	27	10	9.7	6.5
9	6.3	5.0	6.2	10	13	19	28	29	23	10	9.0	6.5
10	6.4	5.1	6.2	9.8	13	20	29	25	21	10	8.6	6.5
11	6.2	6.7	6.2	15	13	20	25	23	19	9.7	7.7	6.5
12	6.1	7.6	6.2	26	13	19	24	24	19	9.6	6.9	6.5
13	6.1	6.6	6.2	16	14	18	27	26	21	9.3	6.8	6.8
14	5.9	6.3	6.2	13	30	18	32	28	23	9.3	7.5	6.8
15	6.1	6.2	5.9	16	24	17	36	31	21	9.3	8.1	6.2
16	6.2	6.2	5.9	16	17	15	37	33	18	9.3	7.4	6.1
17	6.2	6.2	90	19	16	15	37	33	17	9.3	6.3	6.7
18	6.2	6.3	115	17	15	16	31	31	16	9.4	6.6	6.4
19	6.2	6.0	29	14	14	16	26	33	15	11	7.2	6.5
20	6.2	6.0	16	12	14	16	25	33	15	103	8.4	6.5
21	6.2	6.6	12	12	62	15	24	38	15	16	7.0	6.2
22	6.2	8.0	10	9.3	28	15	24	39	15	13	7.2	6.5
23	6.2	6.3	10	9.8	21	13	25	38	14	11	8.0	6.5
24	6.2	14	8.6	9.8	18	14	27	37	14	10	7.7	6.5
25	6.2	8.5	8.6	9.9	18	14	32	37	13	9.6	7.5	5.5
26	5.3	7.2	8.4	9.9	16	13	40	39	13	9.9	7.4	6.0
27	5.3	6.8	8.5	9.4	15	211	51	41	13	9.6	7.4	6.0
28	5.4	6.7	8.5	9.4	14	366	40	40	13	9.2	6.1	6.1
29	5.4	6.2	8.5	9.0	---	95	37	35	13	8.9	7.6	6.1
30	5.4	6.2	8.1	9.0	---	58	37	32	13	8.9	7.6	5.6
31	5.4	---	7.9	9.0	---	43	---	31	---	8.9	7.2	---
TOTAL	187.1	193.0	454.8	366.7	473.0	1182	936	1043	587	412.2	237.9	192.6
MEAN	6.04	6.43	14.7	11.8	16.9	38.1	31.2	33.6	19.6	13.3	7.67	6.42
MAX	6.5	14	115	26	62	366	51	41	30	103	9.7	7.2
MIN	5.3	4.9	5.9	6.5	9.6	13	24	23	13	8.9	6.1	5.5
AC-FT	371	383	902	727	938	2340	1860	2070	1160	818	472	382

WTR YR 1979 TOTAL 6265.3 MEAN 17.2 MAX 366 MIN 4.9 AC-FT 12430

10257600 MISSION CREEK NEAR DESERT HOT SPRINGS, CA

LOCATION.--Lat 34°00'40", long 116°37'38", in NE¼SW¼ sec.12, T.2 S., R.3 E., Riverside County, Hydrologic Unit 18100200, in Mission Creek Indian Reservation, 0.6 mi (1.0 km) downstream from West Fork, and 6.8 mi (10.9 km) northwest of Desert Hot Springs.

DRAINAGE AREA.--35.7 mi² (92.5 km²).

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder with rain-gage attachment. Altitude of gage is 2,400 ft (732 m), from topographic map.

REMARKS.--Records poor. Slight regulation of low flow by two small dams with a combined capacity of about 3 acre-ft (3,700 m³), 2 mi (3 km) above station. No gage-height record for much of year.

AVERAGE DISCHARGE.--12 years, 2.60 ft³/s (0.074 m³/s), 1,880 acre-ft/yr (2.32 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,660 ft³/s (47.0 m³/s) Jan. 25, 1969, gage height, 6.40 ft (1.951 m) on basis of slope-area measurement of maximum flow; no flow for long periods in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 220 ft³/s (6.23 m³/s) Aug. 12, gage height, 2.08 ft (0.634 m); minimum daily, 2.5 ft³/s (0.071 m³/s) Sept. 7-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	3.7	3.8	4.9	9.0	9.2	9.2	11	7.7	5.8	3.4	2.7
2	3.4	3.7	3.8	4.9	9.0	8.5	9.2	11	8.5	6.4	3.4	2.7
3	3.4	3.7	3.8	4.9	9.0	7.7	9.2	11	7.7	6.4	3.4	2.6
4	3.3	3.7	3.8	4.9	9.0	7.7	8.5	11	7.7	5.8	3.4	2.6
5	3.3	3.7	3.8	6.4	9.0	7.7	8.5	11	7.7	5.8	3.4	2.6
6	3.3	3.7	3.8	10	9.2	7.7	8.5	11	7.7	5.8	3.4	2.6
7	3.3	3.7	3.9	7.3	9.2	7.7	9.2	11	8.5	5.8	3.4	2.5
8	3.3	3.7	3.9	6.9	9.2	7.3	10	11	8.5	5.3	3.4	2.5
9	3.3	3.7	3.9	6.7	9.2	7.1	10	11	8.5	5.3	3.1	2.5
10	3.3	3.7	3.9	6.6	9.5	7.1	11	11	7.7	5.3	2.7	2.5
11	3.3	3.7	3.9	6.5	9.5	7.7	10	11	7.7	5.3	3.8	2.5
12	3.3	3.7	3.9	6.5	9.5	7.7	10	11	7.7	4.8	14	2.5
13	3.3	3.7	3.9	6.4	9.5	7.7	10	11	7.1	4.8	5.0	2.5
14	3.3	3.7	3.9	6.4	9.5	7.7	12	11	7.1	4.8	4.4	2.5
15	3.4	3.7	3.9	6.6	9.5	7.7	13	11	7.7	4.8	3.8	2.5
16	3.4	3.8	3.9	12	9.5	8.5	13	11	8.5	4.8	3.7	2.5
17	3.4	3.8	4.5	11	9.5	8.5	15	11	9.2	5.3	3.6	2.5
18	3.4	3.8	5.3	10	9.5	9.2	14	11	9.2	5.3	3.4	2.5
19	3.4	3.8	7.6	9.5	9.5	9.2	13	12	9.2	5.8	3.3	2.5
20	3.5	3.8	5.8	9.2	9.8	11	13	11	8.5	11	3.2	2.5
21	3.5	3.8	5.4	9.0	13	9.2	13	10	7.7	7.7	3.2	2.5
22	3.5	3.8	5.2	9.0	11	9.2	12	9.2	7.7	7.1	3.1	2.5
23	3.5	3.8	5.0	9.0	9.0	9.2	12	9.2	7.1	5.8	3.0	2.5
24	3.5	3.8	4.9	9.0	8.2	9.2	12	9.2	7.1	5.3	3.0	2.5
25	3.6	3.8	4.9	9.0	7.9	8.5	12	9.2	7.1	4.8	2.9	2.5
26	3.6	3.8	4.9	9.0	7.8	8.5	12	9.2	6.4	4.3	2.9	2.5
27	3.6	3.8	4.9	9.0	7.7	16	12	8.5	5.8	3.8	2.9	2.5
28	3.6	3.8	4.9	9.0	7.1	25	12	8.5	5.8	3.8	2.8	2.5
29	3.6	3.8	4.9	9.0	---	15	12	8.5	5.8	3.8	2.8	2.5
30	3.6	3.8	4.9	9.0	---	11	12	7.7	5.8	3.8	2.7	2.5
31	3.7	---	4.9	9.0	---	10	---	7.7	---	3.8	2.7	---
TOTAL	106.4	112.5	139.8	246.6	258.3	293.4	337.3	317.9	228.4	168.4	113.2	75.8
MEAN	3.43	3.75	4.51	7.95	9.23	9.46	11.2	10.3	7.61	5.43	3.65	2.53
MAX	3.7	3.8	7.6	12	13	25	15	12	9.2	11	14	2.7
MIN	3.3	3.7	3.8	4.9	7.1	7.1	8.5	7.7	5.8	3.8	2.7	2.5
AC-FT	211	223	277	489	512	582	669	631	453	334	225	150
a	.20	.90	2.4			1.5	0	0	0	.80	.80	0

CAL YR 1978 TOTAL 3935.13 MEAN 10.8 MAX 200 MIN 0 AC-FT 7810
WTR YR 1979 TOTAL 2398.00 MEAN 6.57 MAX 25 MIN 2.5 AC-FT 4760

a Precipitation, in inches; months with no data due to recorder failure.

10257710 CHINO CANYON CREEK NEAR PALM SPRINGS, CA

LOCATION.--Lat 33°50'21", long 116°36'45", in SW¼SW¼NW¼ sec.7, T.4 S., R.4 E., Riverside County, Hydrologic Unit 18100200, on left bank 800 ft (240 m) downstream from tram building, 3.7 mi (6.0 km) west of Highway 111 on road leading to Palm Springs aerial tramway and 5.5 mi (8.8 km) west of Palm Springs.

DRAINAGE AREA.--3.88 mi² (10.05 km²).

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,500 ft (762 m), from topographic map.

REMARKS.--Records poor. Two diversions for the city of Palm Springs 0.5 mi (0.8 km) upstream.

AVERAGE DISCHARGE.--5 years, 0.463 ft³/s (0.013 m³/s), 335 acre-ft/yr (413,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 247 ft³/s (7.00 m³/s) Aug. 15, 1977, gage height, 5.93 ft (1.807 m), from floodmark, from rating curve extended above 18 ft³/s (0.510 m³/s) on basis of slope-area measurement of maximum flow; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4.0 ft³/s (0.11 m³/s) and maximum (*), from rating curve extended above 18 ft³/s (0.51 m³/s) on basis of slope-area measurement at gage height 5.93 ft (1.807 m):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 28	1415	*8.0	0.23	4.20	1.280
July 20	0330	7.2	0.20	*4.23	1.289

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.07	0	2.7	.94	6.0	2.3	1.3	.12	.66	.39
2		0	.08	0	2.3	.93	5.6	2.3	1.2	.12	.62	.38
3		0	.06	0	1.9	.90	5.4	2.3	1.0	.11	.62	.37
4		0	.06	0	2.0	.87	5.0	2.3	.92	.10	.60	.36
5		0	.06	0	2.1	.84	5.0	2.3	.94	.10	.61	.35
6		0	.06	.09	2.0	.81	4.9	2.3	.94	.09	.64	.34
7		0	.06	0	1.8	.79	4.5	2.3	.94	.09	.64	.34
8		0	.05	0	1.7	.77	4.2	2.3	.85	.09	.62	.33
9		0	.05	0	1.5	.77	4.2	2.2	.64	.09	.57	.33
10		0	.05	0	1.3	.77	4.2	2.0	.50	.09	.56	.29
11		0	.05	0	1.2	.77	4.2	2.0	.38	.08	.56	.24
12		0	.05	0	1.1	.91	4.1	2.0	.34	.08	1.4	.18
13		0	.05	.06	1.0	1.3	3.8	2.0	.30	.08	.70	.13
14		0	.05	.10	1.1	1.7	3.7	1.7	.29	.08	.60	.14
15		0	.05	.41	1.4	1.3	3.3	1.6	.28	.08	.54	.15
16		0	.05	.70	1.5	1.2	3.1	1.6	.26	.08	.54	.14
17		0	.30	1.4	1.2	1.0	3.1	1.6	.24	.08	.56	.14
18		0	.40	1.8	1.1	.96	3.0	1.6	.23	.07	.53	.13
19		0	.20	1.7	1.1	.95	2.9	1.6	.22	.07	.51	.13
20		0	.10	1.5	1.2	.94	2.9	1.6	.20	3.0	.47	.13
21		0	.05	1.5	1.9	.92	2.6	1.6	.19	1.6	.44	.12
22		0	.03	1.1	1.4	.87	2.5	1.6	.19	1.1	.42	.12
23		0	.02	.62	1.3	.84	2.5	1.6	.18	1.0	.40	.11
24		.94	0	.61	1.2	.83	2.4	1.6	.17	.93	.42	.12
25		.88	0	.61	1.1	.84	2.3	1.6	.16	.86	.44	.12
26		.27	.04	.59	1.1	1.4	2.3	1.6	.15	.82	.43	.11
27		.07	.07	.57	1.0	2.0	2.3	1.6	.14	.78	.42	.10
28		.05	.01	.58	.96	6.6	2.4	1.6	.13	.74	.42	.10
29		.05	.01	.56	---	7.6	2.4	1.6	.13	.72	.41	.11
30		.06	.01	1.3	---	7.1	2.3	1.5	.12	.71	.40	.12
31		---	0	2.6	---	6.4	---	1.4	---	.70	.40	---
TOTAL	0	2.32	2.14	18.40	41.16	54.82	107.1	57.2	13.53	14.66	17.15	6.12
MEAN	0	.077	.069	.59	1.47	1.77	3.57	1.85	.45	.47	.55	.20
MAX	0	.94	.40	2.6	2.7	7.6	6.0	2.3	1.3	3.0	1.4	.39
MIN	0	0	0	0	.96	.77	2.3	1.4	.12	.07	.40	.10
AC-FT	0	4.6	4.2	36	82	109	212	113	27	29	34	12

CAL YR 1978 TOTAL 395.17 MEAN 1.08 MAX 11 MIN 0 AC-FT 784
WTR YR 1979 TOTAL 334.60 MEAN .92 MAX 7.6 MIN 0 AC-FT 664

10258000 TAHQUITZ CREEK NEAR PALM SPRINGS, CA

LOCATION.--Lat 33°48'18", long 116°33'30", in NE¼SW¼SW¼ sec.22, T.4 S., R.4 E., Riverside County, Hydrologic Unit 18100200, on left bank 2.2 mi (3.5 km) southwest of Palm Springs, and 7 mi (11 km) upstream from mouth.

DRAINAGE AREA.--16.8 mi² (43.5 km²).

PERIOD OF RECORD.--October 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 762.5 ft (232.41 m) National Geodetic Vertical Datum of 1929 (levels by Riverside County Flood Control District). Prior to Aug, 25, 1970, at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--32 years, 4.38 ft³/s (0.124 m³/s), 3,170 acre-ft/yr (3.91 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,900 ft³/s (82.1 m³/s) Nov. 22, 1965, Jan. 25, 1969, gage height, 12.34 ft (3.761 m), from rating curve extended above 70 ft³/s (1.98 m³/s) on basis of slope-area measurements at gage heights 10.45 (3.185 m) and 12.34 ft (3.761 m); no flow for parts of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 85 ft³/s (2.41 m³/s) revised, and maximum (*), from rating curve extended above 70 ft³/s (1.98 m³/s):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 27	2130	88	2.49	6.27	1.911
July 20	0530	*118	3.34	6.63	2.021

Minimum daily discharge, 0.87 ft³/s (0.025 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.87	1.5	3.3	3.1	4.5	7.5	18	46	60	13	6.8	4.2
2	.94	1.4	4.2	3.0	4.5	7.2	17	41	56	13	6.4	4.1
3	1.2	1.4	3.4	3.1	5.0	6.9	16	42	54	12	6.2	4.0
4	1.3	1.3	3.3	3.0	4.2	6.9	16	51	52	12	6.0	3.9
5	1.5	1.4	3.1	3.6	4.0	6.9	16	55	51	11	6.2	3.7
6	1.4	1.5	3.0	5.0	4.1	7.0	17	55	51	11	6.4	3.7
7	1.3	1.4	2.7	4.2	4.3	7.5	17	53	51	11	6.5	3.6
8	1.6	1.4	2.7	3.8	4.4	8.3	17	49	44	10	6.3	3.6
9	1.7	1.4	2.8	3.7	4.5	9.3	18	40	39	9.3	5.7	3.5
10	1.6	1.4	2.9	3.6	4.6	9.6	18	35	36	9.1	5.5	3.4
11	1.5	1.6	2.7	3.7	4.7	10	17	35	35	8.9	5.7	2.4
12	1.3	2.7	2.7	5.0	4.9	10	18	39	34	8.7	14	1.8
13	1.1	2.4	2.7	4.6	5.1	11	19	44	33	8.6	8.1	1.9
14	1.4	2.6	2.6	4.1	7.9	10	22	49	32	8.4	6.6	2.1
15	1.7	2.3	2.6	4.5	9.8	9.8	26	56	30	8.2	5.9	2.0
16	1.6	2.2	2.6	4.9	8.3	9.7	28	59	28	7.8	5.8	1.9
17	1.7	2.2	15	5.9	7.7	9.6	27	57	26	7.7	6.0	2.0
18	1.7	2.2	21	5.3	7.3	9.0	25	58	24	7.6	5.9	1.9
19	1.6	2.2	8.8	4.8	7.2	9.0	23	59	23	12	5.6	1.8
20	1.7	2.2	6.4	4.6	7.0	9.0	23	62	22	47	5.2	1.8
21	2.2	2.3	5.2	4.3	9.8	8.4	24	70	20	16	4.7	1.7
22	2.0	2.8	4.5	4.1	8.8	8.0	26	73	19	12	4.3	1.7
23	1.7	2.5	4.0	4.0	8.2	7.8	27	71	19	10	4.4	1.6
24	1.7	4.9	3.8	3.9	7.7	7.8	29	71	18	9.5	4.5	1.7
25	1.8	3.9	3.7	4.0	7.4	8.1	33	71	17	8.9	4.7	1.7
26	1.8	3.2	3.6	3.7	7.3	8.4	36	73	16	8.4	4.7	1.5
27	1.6	2.9	3.4	3.6	7.1	22	48	75	15	8.0	4.5	1.4
28	1.6	2.8	3.4	3.7	7.0	49	45	73	14	7.6	4.5	1.4
29	1.5	2.8	3.4	3.5	---	27	46	68	14	7.4	4.5	1.6
30	1.4	3.1	3.3	3.5	---	21	48	66	13	7.4	4.4	1.9
31	1.4	---	3.2	4.3	---	19	---	63	---	7.2	4.3	---
TOTAL	47.41	67.9	140.0	126.1	177.3	360.7	762	1759	946	338.7	180.3	73.5
MEAN	1.53	2.26	4.52	4.07	6.33	11.6	25.4	56.7	31.5	10.9	5.82	2.45
MAX	2.2	4.9	21	5.9	9.8	49	48	75	60	47	14	4.2
MIN	.87	1.3	2.6	3.0	4.0	6.9	16	35	13	7.2	4.3	1.4
AC-FT	94	135	278	250	352	715	1510	3490	1880	672	358	146

CAL YR 1978 TOTAL 7448.72 MEAN 20.4 MAX 148 MIN .81 AC-FT 14770
WTR YR 1979 TOTAL 4978.91 MEAN 13.6 MAX 75 MIN .87 AC-FT 9880

10258500 PALM CANYON CREEK NEAR PALM SPRINGS, CA

LOCATION.--Lat 33°44'42", long 116°32'05", in NE¼SW¼SE¼ sec.11, T.5 S., R.4 E., Riverside County, Hydrologic Unit 18100200, on right bank 0.8 mi (1.3 km) upstream from Murray Canyon Creek, and 6 mi (10 km) south of Palm Springs.

DRAINAGE AREA.--93.3 mi^2 (241.6 km^2).

PERIOD OF RECORD.--January 1930 to January 1942, October 1947 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 700 ft (213 m), from topographic map. Prior to Jan. 14, 1942, at datum 0.2 ft (0.06 m) higher.

REMARKS.--Records fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--43 years (water years 1931-41, 1948-79), 3.73 ft^3/s (0.106 m^3/s), 2,700 acre-ft/yr (3.33 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,400 ft^3/s (125 m^3/s) July 20, 1979, gage height, 6.38 ft (1.945 m), on basis of slope-area measurement of maximum flow; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft^3/s (2.83 m^3/s) and maximum (*), on basis of slope-area measurement at gage height 6.38 ft (1.945):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 18	1830	404	11.4	3.49	1.064	Feb. 21	0900	231	6.54	2.91	0.887
Jan. 5	0230	191	5.41	2.83	0.863	Mar. 28	1130	319	9.03	3.32	1.012
Jan. 31	Unknown	201	5.69	3.03	0.924	July 20	0215	*4,400	125	6.38	1.945

Minimum daily discharge, no flow Oct. 1-31, Nov. 1-11, 13-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.50	3.2	93	33	71	11	4.8	.25	.50	.22
2		0	.60	3.2	63	34	60	12	4.4	.32	.41	.18
3		0	.50	2.6	47	28	50	13	4.4	.41	.41	.15
4		0	.41	15	46	27	44	12	4.1	.41	.41	.19
5		0	.41	65	47	25	40	11	3.8	.32	.50	.14
6		0	.60	13	46	24	39	11	3.8	.32	.72	.10
7		0	.41	7.4	57	23	36	11	3.8	.19	.85	.07
8		0	.50	4.8	65	22	34	11	3.5	.10	.50	.19
9		0	.60	3.5	55	22	32	11	2.9	.05	.32	.07
10		0	.60	2.4	46	21	32	11	2.6	.04	.19	.10
11		0	.41	1.5	42	20	29	9.4	2.1	.05	.41	.14
12		.27	.60	1.0	36	19	27	7.4	1.5	.04	8.4	.19
13		0	.41	1.0	35	20	26	7.4	1.3	.05	3.8	.19
14		0	.50	6.4	40	19	25	6.4	.85	.10	2.1	.10
15		0	.60	19	38	19	24	6.9	1.0	.07	1.5	.07
16		0	.60	43	32	18	23	6.4	.85	.04	10	.07
17		0	99	33	26	19	23	6.0	1.3	.05	9.4	.07
18		0	162	10	25	18	22	6.0	1.7	.04	1.5	.07
19		0	128	6.0	22	19	20	6.4	1.3	4.1	1.2	.05
20		0	13	4.4	21	25	19	6.9	1.5	439	1.0	.05
21		0	6.0	3.5	81	25	19	6.9	1.3	15	.85	.05
22		0	5.6	2.6	62	21	15	6.9	1.2	2.6	.85	.05
23		0	5.2	2.1	55	19	15	6.0	1.2	1.0	.72	.05
24		2.1	4.8	1.9	42	18	14	5.6	1.2	1.0	.72	.19
25		1.9	4.8	1.2	36	17	13	5.6	1.0	.60	.72	.25
26		1.0	4.4	1.2	34	16	12	6.0	.85	.50	.65	.25
27		.41	4.1	1.2	30	28	13	6.4	.60	.50	.52	.14
28		.41	4.1	3.5	28	206	12	6.0	.50	.41	.48	.07
29		.32	3.2	2.4	---	137	12	5.6	.50	.41	.36	.19
30		.32	3.7	2.4	---	98	12	5.6	.41	.60	.31	.19
31		---	3.2	120	---	83	---	5.2	---	.85	.26	---
TOTAL	0	6.73	459.35	387.4	1250	1123	813	249.0	60.26	469.42	50.56	3.84
MEAN	0	.22	14.8	12.5	44.6	36.2	27.1	8.03	2.01	15.1	1.63	.13
MAX	0	2.1	162	120	93	206	71	13	4.8	439	10	.25
MIN	0	0	.41	1.0	21	16	12	5.2	.41	.04	.19	.05
AC-FT	0	13	911	768	2480	2230	1610	494	120	931	100	7.6

CAL YR 1978 TOTAL 7204.94 MEAN 19.7 MAX 440 MIN 0 AC-FT 14290
WTR YR 1979 TOTAL 4872.56 MEAN 13.3 MAX 439 MIN 0 AC-FT 9660

10259000 ANDREAS CREEK NEAR PALM SPRINGS, CA

LOCATION.--Lat 33°45'36", long 116°32'57", in NW¼SE¼SE¼ sec.3, T.5 S., R.4 E., Riverside County, Hydrologic Unit 18100200, on left bank at Bureau of Indian Affairs diversion dam, 1.1 mi (1.8 km) above mouth, and 5.1 mi (8.2 km) south of Palm Springs.

DRAINAGE AREA.--8.61 mi² (22.30 km²).

PERIOD OF RECORD.--October 1948 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 800 ft (244 m), from topographic map. Prior to Mar. 25, 1949, reference point at same site at different datum.

REMARKS.--Records good. No regulation above station. One small diversion for domestic use about 1 mi (2 km) above station.

AVERAGE DISCHARGE.--31 years, 2.31 ft³/s (0.065 m³/s), 1,670 acre-ft/yr (2.06 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,960 ft³/s (55.5 m³/s) Aug. 31, 1954, gage height, 7.11 ft (2.167 m), from rating curve extended above 80 ft³/s (2.27 m³/s) on basis of slope-area measurement of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.42 m³/s), revised, and maximum (*), from rating curve extended above 80 ft³/s (2.27 m³/s) on basis of slope-area measurement at gage height 7.11 ft (2.167 m):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 28	0515	*76	2.15	2.70	0.823
July 20	0415	72	2.04	2.66	0.811

Minimum daily discharge, 1.2 ft³/s (0.034 m³/s) Oct. 9, 12-17, Sept. 9-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	2.0	2.6	2.6	6.2	8.4	20	11	4.9	3.3	2.1	1.5
2	1.3	2.0	2.4	3.8	6.2	7.8	19	10	4.9	3.6	2.1	1.7
3	1.3	1.9	3.0	3.4	6.2	7.8	17	10	4.9	3.8	2.3	1.5
4	1.3	1.8	3.1	3.4	6.2	7.8	16	10	5.3	3.6	2.3	1.5
5	1.4	1.8	2.7	4.1	6.2	7.8	15	10	5.3	3.6	3.1	1.4
6	1.4	1.8	2.1	5.3	6.2	7.8	15	9.5	5.3	3.6	3.2	1.3
7	1.4	1.8	2.1	4.5	6.2	8.1	15	9.3	5.3	3.3	2.8	1.4
8	1.3	1.8	2.1	4.5	6.7	8.4	14	9.3	5.3	3.1	2.6	1.3
9	1.2	1.8	2.1	4.5	6.7	8.9	15	8.6	5.3	2.8	2.3	1.2
10	1.3	1.8	2.1	4.5	6.7	8.9	16	8.1	5.3	2.7	2.1	1.2
11	1.3	2.4	2.1	4.5	6.7	9.5	15	8.0	5.3	2.6	3.1	1.2
12	1.2	2.2	2.1	4.9	7.2	7.6	14	7.9	5.3	2.6	9.7	1.3
13	1.2	1.9	2.1	4.9	6.2	7.7	14	8.0	5.3	2.8	4.9	1.5
14	1.2	1.9	2.1	4.5	12	7.7	14	8.0	5.1	2.7	3.8	1.7
15	1.2	1.9	2.1	4.9	9.7	7.6	14	8.3	4.9	2.7	3.1	1.5
16	1.2	1.9	2.1	5.3	8.4	7.5	14	8.3	4.9	2.3	3.8	1.5
17	1.2	1.9	14	6.7	7.8	7.6	14	8.1	5.2	2.4	2.8	1.5
18	1.5	1.9	18	6.2	7.2	7.2	13	8.0	5.4	1.9	3.1	1.5
19	1.5	2.0	7.0	5.3	7.2	8.1	13	8.1	5.2	5.7	3.1	1.4
20	2.1	2.0	3.8	5.3	7.2	8.2	13	9.0	5.0	20	2.8	1.4
21	2.2	2.0	3.3	5.7	16	7.9	12	9.0	4.7	6.4	2.3	1.4
22	1.7	2.0	3.1	5.3	10	7.7	12	8.4	4.6	4.5	2.4	1.4
23	1.6	2.0	3.1	5.3	8.4	7.6	11	7.8	4.4	3.8	2.0	1.4
24	2.0	3.1	2.9	5.3	7.8	7.4	11	7.2	4.3	3.2	1.8	1.5
25	2.1	2.6	2.8	5.3	7.8	7.4	11	7.8	4.1	3.1	1.6	1.5
26	1.9	2.5	2.8	5.3	7.8	7.3	11	7.8	3.8	3.0	1.6	1.4
27	1.8	2.4	2.8	5.3	7.2	25	12	7.8	3.6	2.9	1.5	1.7
28	1.7	2.5	3.1	5.3	7.8	53	11	6.7	3.4	2.3	1.6	1.6
29	1.7	2.5	3.1	4.9	---	31	11	5.3	3.3	2.3	1.7	1.4
30	1.8	2.5	3.1	4.9	---	27	11	5.3	3.4	3.1	1.7	1.5
31	1.8	---	2.8	5.3	---	22	---	4.9	---	2.8	1.6	---
TOTAL	47.1	62.6	112.6	151.0	215.9	363.7	413	255.5	143.0	116.5	84.9	43.3
MEAN	1.52	2.09	3.63	4.87	7.71	11.7	13.8	8.24	4.77	3.76	2.74	1.44
MAX	2.2	3.1	18	6.7	16	53	20	11	5.4	20	9.7	1.7
MIN	1.2	1.8	2.1	2.6	6.2	7.2	11	4.9	3.3	1.9	1.5	1.2
AC-FT	93	124	223	300	428	721	819	507	284	231	168	86

CAL YR 1978 TOTAL 2572.9 MEAN 7.05 MAX 100 MIN 1.2 AC-FT 5100
WTR YR 1979 TOTAL 2009.1 MEAN 5.50 MAX 53 MIN 1.2 AC-FT 3990

10259200 DEEP CREEK NEAR PALM DESERT, CA

LOCATION.--Lat 33°37'52", long 116°23'29", in SE¼NE¼SE¼ sec.19, T.6 S., R.6 E., Riverside County, Hydrologic Unit 18100200, on left bank 500 ft (150 m) downstream from unnamed tributary, and 6.3 mi (10.1 km) south of Palm Desert.

DRAINAGE AREA.--30.6 mi^2 (79.3 km^2).

PERIOD OF RECORD.--May 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,440 ft (439 m), from topographic map.

REMARKS.--Records fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--17 years, 1.24 ft^3/s (0.035 m^3/s), 898 acre-ft/yr (1.11 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,100 ft^3/s (201 m^3/s) Sept. 10, 1976, gage height, 7.84 ft (2.390 m), recorded in gage well, 9.85 ft (3.002 m) from floodmarks, from rating curve extended above 3.3 ft^3/s (0.093 m^3/s) on basis of slope-area measurements at gage heights 2.68 ft (0.817 m), 5.15 ft (1.570 m), and 7.84 ft (2.390 m); no flow for many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 20 ft^3/s (0.57 m^3/s) and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 17	1845	161	4.56	3.48	1.061	Mar. 28	0430	343	9.71	4.09	1.247
Jan. 17	1700	32	0.91	2.50	0.762	July 20	0430	*1,020	28.9	5.16	1.573
Feb. 14	1300	25	0.71	2.36	0.719	July 24	1200	442	12.5	4.32	1.317
Feb. 21	1030	29	0.82	2.44	0.744	Aug. 12	Unknown	139	3.94	3.37	1.027

Minimum daily discharge, 0.02 ft^3/s (0.001 m^3/s) Oct. 5-9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.15	.82	2.3	7.5	7.3	21	7.8	2.4	.35	1.3	.85
2	.03	.15	1.0	2.2	7.1	6.9	18	7.4	2.5	.28	1.1	.82
3	.03	.15	.92	2.2	10	6.1	16	6.7	2.4	.31	1.0	.80
4	.03	.17	.76	2.2	8.7	5.7	15	6.6	2.3	.44	1.0	.78
5	.02	.18	.65	2.6	8.4	5.4	13	6.6	2.2	.46	1.0	.75
6	.02	.19	.61	11	8.9	5.2	13	6.3	2.1	.45	1.0	.74
7	.02	.20	.61	11	12	5.4	13	6.1	2.1	.43	1.1	.73
8	.02	.20	.56	7.5	14	6.0	13	6.1	2.0	.41	.97	.72
9	.02	.21	.55	6.1	14	7.0	13	6.0	1.9	.28	.93	.70
10	.03	.21	.56	5.2	15	8.0	12	5.4	1.9	.21	.89	.64
11	.03	.36	.56	4.7	15	8.0	12	5.0	1.7	.29	.91	.45
12	.03	.79	.56	7.5	15	7.6	11	4.7	1.1	.26	4.1	.36
13	.03	.57	.56	6.6	16	7.6	11	4.4	1.2	.25	2.5	.39
14	.04	.49	.56	5.5	20	7.4	11	4.1	1.1	.26	1.9	.42
15	.04	.45	.56	5.7	19	6.7	11	4.0	.96	.27	1.8	.40
16	.04	.45	.56	20	15	6.3	12	3.9	.91	.27	1.7	.38
17	.05	.47	38	30	13	5.9	11	3.8	.95	.27	1.8	.40
18	.05	.47	49	21	12	5.5	11	3.6	1.1	.25	1.7	.38
19	.05	.47	23	15	11	5.4	9.4	3.5	1.1	.29	1.6	.36
20	.06	.46	12	11	10	6.9	8.6	3.6	1.0	157	1.5	.36
21	.06	.48	7.4	9.5	18	6.4	8.2	3.5	1.0	59	1.4	.34
22	.06	.52	6.2	8.1	15	6.0	8.0	3.5	.92	56	1.3	.34
23	.06	.56	5.4	7.1	13	5.6	7.8	3.4	.87	48	1.3	.32
24	.07	8.2	4.5	6.6	11	5.3	7.5	3.2	.84	29	1.0	.34
25	.07	3.9	3.9	6.4	9.7	5.3	8.5	3.3	.79	2.1	.91	.33
26	.07	1.6	3.5	5.7	8.8	5.3	8.6	3.2	.68	1.8	.86	.29
27	.07	1.1	3.2	5.3	8.0	12	10	3.2	.60	1.4	.88	.28
28	.09	.91	2.9	5.5	7.4	161	9.2	3.1	.53	1.4	.93	.28
29	.13	.83	2.8	5.2	---	51	8.6	2.6	.47	1.3	.95	.34
30	.15	.77	2.7	4.7	---	31	8.1	2.6	.44	1.4	.92	.38
31	.15	---	2.5	6.4	---	24	---	2.5	---	1.5	.87	---
TOTAL	1.65	25.66	177.40	249.8	342.5	443.2	339.5	139.7	40.06	365.93	41.12	14.67
MEAN	.053	.86	5.72	8.06	12.2	14.3	11.3	4.51	1.34	11.8	1.33	.49
MAX	.15	8.2	49	30	20	161	21	7.8	2.5	157	4.1	.85
MIN	.02	.15	.55	2.2	7.1	5.2	7.5	2.5	.44	.21	.86	.28
AC-FT	3.3	51	352	495	679	879	673	277	79	726	82	29

CAL YR 1978 TOTAL 1914.77 MEAN 5.25 MAX 320 MIN .01 AC-FT 3800
WTR YR 1979 TOTAL 2181.19 MEAN 5.98 MAX 161 MIN .02 AC-FT 4330

10259300 WHITEWATER RIVER AT INDIO, CA

LOCATION.--Lat 33°44'06", long 116°14'39", in NW¼NE¼SW¼ sec.15, T.5 S., R.7 E., Riverside County, Hydrologic Unit 18100200, at center bridge pier on Interstate Highway 10, and 2 mi (3 km) northwest of Indio.

DRAINAGE AREA.--1,073 mi² (2,779 km²).

PERIOD OF RECORD.--March 1966 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 5 ft (2 m), from topographic map.

REMARKS.--Records poor. No regulation above station. Water diverted from tributary streams for municipal supply in vicinity of Palm Springs. At times water is released at Coachella Canal crossing, 0.8 mi (1.3 km) upstream.

AVERAGE DISCHARGE.--13 years, 3.16 ft³/s (0.089 m³/s), 2,290 acre-ft/yr (2.82 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s (323 m³/s) Jan. 25, 1969, gage height, 14.41 ft (4.392 m), from rating curve extended above 1,300 ft³/s (36.8 m³/s) on basis of slope-area measurement at gage height 15.3 ft (4.66 m); no flow all or most of each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 2 or 3, 1938, reached a discharge of 29,000 ft³/s (821 m³/s), on basis of slope-area measurement at site 4.5 mi (7.2 km) upstream. Flood of November 22, 1965, reached a stage of 15.3 ft (4.66 m) from floodmarks, discharge 14,100 ft³/s (399 m³/s) on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*), on basis of slope-area measurement at gage height 12.6 ft (0.36 m):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 29	0115	897	25.4	8.41	2.563	Aug. 12	Unknown	1,190	33.7	8.63	2.630
July 20	Unknown	*8,570	243	12.55	3.825						

Minimum daily discharge, no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	15		0				0	0	
2	0	0	0	5.2		0				0	0	
3	0	0	0	0		0				0	0	
4	0	0	0	0		0				0	0	
5	0	0	0	0		0				0	0	
6	0	0	0	0		0				0	0	
7	0	0	0	0		0				0	0	
8	0	0	0	0		0				0	0	
9	0	0	0	0		0				0	0	
10	0	0	0	0		0				0	0	
11	0	0	0	0		0				0	0	
12	0	0	0	0		0				0	101	
13	0	5.0	0	0		0				0	0	
14	0	0	0	0		0				0	0	
15	0	0	0	0		0				0	0	
16	0	0	0	0		0				0	0	
17	0	0	0	0		5.9				0	0	
18	0	0	0	0		0				0	0	
19	0	0	0	0		0				0	0	
20	0	0	0	0		0				948	0	
21	0	0	0	0		0				48	0	
22	0	0	0	0		0				0	0	
23	0	0	0	0		0				0	0	
24	0	0	0	0		0				0	0	
25	0	4.8	0	0		0				0	0	
26	2.7	0	4.5	0		0				0	0	
27	0	13	0	0		0				0	0	
28	0	3.6	0	0		184				0	0	
29	0	0	0	0	---	117				0	0	
30	2.5	0	0	0	---	0				0	0	
31	0	---	2.1	0	---	0	---		---	0	0	---
TOTAL	5.2	26.4	6.6	20.2	0	306.9	0	0	0	996	101	0
MEAN	.17	.88	.21	.65	0	9.90	0	0	0	32.1	3.26	0
MAX	2.7	13	4.5	15	0	184	0	0	0	948	101	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	10	52	13	40	0	609	0	0	0	1980	200	0

CAL YR 1978 TOTAL 2408.73 MEAN 6.60 MAX 511 MIN 0 AC-FT 4780
WTR YR 1979 TOTAL 1462.30 MEAN 4.01 MAX 948 MIN 0 AC-FT 2900

10259540 WHITEWATER RIVER NEAR MECCA, CA

LOCATION.--Lat 33°31'29", long 116°04'36", in NW¼NW¼NW¼ sec.32, T.7 S., R.9 E., Riverside County, Hydrologic Unit 18100200, on left bank 1.6 mi (2.6 km) upstream from mouth at Salton Sea and 3.3 mi (5.3 km) south of Mecca.

DRAINAGE AREA.--1,495 mi² (3,872 km²).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 221.00 ft (67.361 m) below National Geodetic Vertical Datum of 1929 (levels by Coachella County Water District). Oct. 1, 1960, to Mar. 22, 1967, at site 1.3 mi (2.1 km) downstream and Mar. 23, 1967, to July 22, 1970, at site 0.7 mi (1.1 km) downstream at different datums.

REMARKS.--Records fair. Most of the flow represents seepage and return flow from irrigated areas.

COOPERATION.--Fifty-one discharge measurements were furnished by Coachella Valley County Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,500 ft³/s (70.8 m³/s) Jan. 25, 1969, estimated; minimum daily, 37 ft³/s (1.05 m³/s) Nov. 25-29, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,450 ft³/s (69.4 m³/s) July 20, estimated; minimum daily, 99 ft³/s (2.80 m³/s) Nov. 9, 10, estimated.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	106	108	115	136	128	143	139	115	108	108	118
2	119	106	106	116	139	128	139	140	115	107	108	126
3	121	105	105	118	139	129	137	138	115	105	109	127
4	122	104	105	118	139	131	136	136	115	104	110	116
5	120	103	105	115	139	134	137	132	115	104	111	107
6	119	102	105	112	138	135	138	125	115	105	114	106
7	113	102	107	111	136	136	140	121	115	106	118	110
8	110	100	109	111	132	138	141	118	114	107	121	112
9	108	99	111	110	130	139	143	118	114	108	121	112
10	106	99	111	109	126	140	149	118	114	110	121	107
11	104	100	113	109	120	140	149	118	113	112	125	103
12	106	103	113	110	118	142	150	119	113	113	800	103
13	109	104	112	113	116	143	150	119	112	114	520	107
14	110	108	112	118	116	144	150	122	112	116	330	109
15	110	108	110	120	116	146	150	122	112	119	270	113
16	112	108	110	122	118	147	150	121	112	119	200	111
17	113	108	109	126	120	149	150	122	112	120	150	104
18	115	108	108	128	124	150	150	126	112	120	125	104
19	114	108	108	128	129	152	150	130	111	125	118	106
20	113	108	108	130	132	154	150	132	111	2450	116	108
21	112	108	107	130	133	155	149	125	111	350	113	108
22	111	108	107	128	128	157	144	122	111	190	112	110
23	110	108	107	125	128	158	142	118	112	130	110	108
24	110	108	106	124	128	159	140	117	112	120	110	110
25	109	108	106	125	128	160	139	114	112	116	113	120
26	108	109	106	127	128	162	138	114	112	114	118	123
27	108	109	105	128	128	160	138	114	112	112	117	124
28	107	110	108	129	128	164	138	114	110	110	118	120
29	107	110	110	130	---	161	138	115	110	108	115	113
30	107	109	113	131	---	159	138	115	109	107	117	110
31	107	---	114	135	---	151	---	115	---	107	118	---
TOTAL	3458	3176	3364	3751	3592	4551	4306	3799	3378	6136	5156	3355
MEAN	112	106	109	121	128	147	144	123	113	198	166	112
MAX	122	110	114	135	139	164	150	140	115	2450	800	127
MIN	104	99	105	109	116	128	136	114	109	104	108	103
AC-FT	6860	6300	6670	7440	7120	9030	8540	7540	6700	12170	10230	6650

CAL YR 1978 TOTAL 46399 MEAN 127 MAX 1140 MIN 80 AC-FT 92030
WTR YR 1979 TOTAL 48022 MEAN 132 MAX 2450 MIN 99 AC-FT 95250

10259920 WASTEWAY NO. 1 NEAR MECCA, CA

LOCATION.--Lat 33°31'40", long 115°58'23", in NW¼SW¼SW¼ sec.29, T.7 S., R.10 E., Riverside County, Hydrologic Unit 18100100, on right bank of channel, 1,000 ft (300 m) upstream from mouth, 2,250 ft (690 m) downstream from State Highway 111, and 6.6 mi (10.6 km) southeast of Mecca.

PERIOD OF RECORD.--February 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is -220 ft (-67.1 m), from topographic map.

REMARKS.--Records poor. Discharge represents seepage and return flows from irrigated areas. At times water is wasted from Coachella Canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 586 ft^3/s (16.6 m^3/s) Aug. 18, 1977; minimum daily, 1.1 ft^3/s (0.03 m^3/s) Jan. 8, Apr. 9, 10, May 21-23, 1977.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	2.9	2.1	2.0	320	2.7	2.4	2.9	2.9	2.9	3.2	4.1
2	3.4	2.9	2.0	2.0	255	2.7	2.4	2.9	3.2	2.9	3.5	3.8
3	3.4	2.9	2.0	2.0	193	2.9	2.4	2.9	3.2	2.7	3.2	4.1
4	3.4	2.9	2.0	2.0	40	3.2	2.4	3.2	3.2	2.7	3.2	3.2
5	3.3	2.8	2.0	2.0	2.0	3.5	2.7	3.2	3.2	2.7	3.2	3.2
6	3.3	2.8	2.0	1.9	4.8	3.5	2.7	2.9	2.9	2.7	3.2	2.9
7	3.3	2.8	2.0	1.9	2.0	3.8	3.2	2.9	2.9	2.7	3.2	3.2
8	3.3	2.8	2.0	1.9	2.0	4.4	3.5	2.9	2.9	2.4	2.9	2.7
9	3.3	2.8	2.0	1.9	2.0	5.1	3.5	2.9	2.9	2.2	3.2	2.4
10	3.3	2.8	2.2	1.9	1.8	5.9	3.8	2.7	2.9	2.2	3.5	2.4
11	3.2	11	2.2	1.8	1.8	6.3	4.1	2.4	2.9	2.2	3.2	2.7
12	3.2	18	2.2	1.8	1.8	6.7	4.1	2.7	2.7	2.2	3.8	2.9
13	3.2	6.8	2.2	1.8	2.0	6.7	3.8	2.7	2.7	4.4	7.5	2.7
14	3.2	4.2	2.7	1.8	2.2	7.2	3.8	2.7	2.7	4.4	11	2.7
15	3.2	2.7	2.9	73	2.2	8.1	59	2.7	2.9	3.5	6.8	2.7
16	3.2	2.6	2.7	1.8	2.2	8.6	164	2.7	2.7	2.4	3.5	2.9
17	3.1	2.6	2.7	1.6	2.2	9.1	86	2.7	2.9	2.4	3.8	2.7
18	3.1	2.5	2.4	2.0	2.2	9.1	1.6	2.7	3.2	2.7	4.1	2.7
19	3.1	2.5	2.2	2.0	2.2	9.6	1.8	2.7	3.2	2.7	3.2	3.5
20	3.1	2.5	2.2	2.0	2.2	283	2.4	2.7	3.5	3.8	3.2	3.5
21	3.1	2.4	2.2	2.0	2.0	536	2.4	2.7	2.9	7.6	3.5	5.9
22	3.1	2.4	2.2	2.0	1.8	295	2.4	2.7	2.4	2.7	4.1	5.5
23	3.0	2.4	2.2	2.0	1.6	91	2.4	2.7	2.7	2.7	4.1	5.1
24	3.0	4.2	2.2	1.8	1.6	2.2	2.4	2.7	2.4	2.7	4.8	5.5
25	3.0	5.2	2.2	2.0	1.6	1.8	2.6	2.9	2.2	2.7	4.8	3.2
26	3.0	11	2.0	2.2	1.6	1.6	2.7	3.2	2.2	2.2	4.8	3.5
27	3.0	3.6	2.0	2.4	1.8	1.6	2.8	2.9	2.0	2.4	4.4	4.1
28	3.0	2.2	2.0	2.2	1.8	1.8	2.9	2.7	2.0	2.7	4.1	4.1
29	2.9	2.1	2.0	2.4	---	1.8	2.9	2.9	2.4	2.7	4.8	3.2
30	2.9	2.1	2.0	2.4	---	2.0	2.9	2.7	2.7	2.7	4.4	2.9
31	2.9	---	2.0	94	---	2.4	---	2.7	---	2.9	3.5	---
TOTAL	97.9	121.4	67.7	224.5	857.4	1329.3	386.0	86.9	83.5	90.8	129.7	104.0
MEAN	3.16	4.05	2.18	7.24	30.6	42.9	12.9	2.80	2.78	2.93	4.18	3.47
MAX	3.4	18	2.9	94	320	536	164	3.2	3.5	7.6	11	5.9
MIN	2.9	2.1	2.0	1.6	1.6	1.6	1.6	2.4	2.0	2.2	2.9	2.4
AC-FT	194	241	134	445	1700	2640	766	172	166	180	257	206

CAL YR 1978 TOTAL 1649.4 MEAN 4.52 MAX 87 MIN 1.3 AC-FT 3270
WTR YR 1979 TOTAL 3579.1 MEAN 9.81 MAX 536 MIN 1.6 AC-FT 7100

10260500 DEEP CREEK NEAR HESPERIA, CA

LOCATION.--Lat 34°20'28", long 117°13'39", in NW¼NE¼SE¼ sec.18, T.3 N., R.3 W., San Bernardino County, Hydrologic Unit 18090208, on right bank 0.5 mi (0.8 km) upstream from confluence of West Fork Mojave River and Mojave River Forks Reservoir, 7 mi (11 km) southeast of Hesperia and 11 mi (18 km) downstream from Lake Arrowhead.

DRAINAGE AREA.--134 mi² (347 km²).

PERIOD OF RECORD.--October 1904 to September 1922, October 1929 to current year. Monthly discharge only prior to January 1930, published in WSP 1314.

GAGE.--Water-stage recorder. Broad-crested weir since December 1938. Altitude of gage is 3,050 ft (930 m), from topographic map. See WSP 1314 for history of changes prior to Dec. 10, 1938.

REMARKS.--Records good. Slight regulation by Lake Arrowhead, capacity, 48,000 acre-ft (59.2 hm³), used principally for recreation.

AVERAGE DISCHARGE.--68 years, 69.3 ft³/s (1.963 m³/s), 50,210 acre-ft/yr (61.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,600 ft³/s (1,320 m³/s) Mar. 2, 1938, gage height unknown, based on slope-area measurement of maximum flow; maximum gage height, 23.81 ft (7.257 m) Feb. 10, 1978, (backwater from Forks Reservoir); no flow July 17, 18, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 18	0215	2,590	73.3	4.73	1.442	Mar. 27	2245	*5,690	161	6.23	1.899
Feb. 21	0915	518	14.7	3.05	0.930	Apr. 15	0200	610	17.3	3.12	0.951

Minimum daily discharge, 3.4 ft³/s (0.096 m³/s) Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	11	22	32	130	136	501	268	60	17	7.0	7.1
2	8.4	11	40	31	210	124	456	264	57	17	6.7	6.7
3	8.3	11	32	33	169	117	427	241	55	17	7.2	6.4
4	8.4	11	25	30	63	124	420	247	54	17	6.9	6.1
5	8.4	11	23	72	62	140	451	251	51	17	6.6	6.1
6	8.3	11	22	219	49	162	439	224	48	17	7.1	5.9
7	8.1	11	18	128	57	213	454	212	48	16	8.2	5.7
8	8.1	11	17	105	64	245	417	198	45	15	8.4	7.2
9	8.1	11	19	95	73	280	449	173	42	14	8.0	5.6
10	8.3	12	18	88	80	275	365	152	41	14	7.2	5.7
11	8.8	78	18	82	91	291	334	147	37	14	7.1	5.9
12	8.6	38	18	146	101	291	355	146	36	13	8.5	5.6
13	8.1	27	17	123	110	320	409	149	35	13	10	5.5
14	8.0	25	17	97	306	297	454	147	32	13	10	5.4
15	7.8	23	17	141	265	275	487	143	30	12	9.2	5.8
16	7.8	21	16	239	163	26[illegible]	480	129	28	12	8.9	3.4
17	8.0	20	46	182	122	226	456	123	29	11	9.0	4.9
18	8.1	20	990	165	112	204	376	115	31	11	10	5.2
19	8.3	20	214	131	112	191	363	112	30	11	12	5.4
20	9.3	22	140	110	109	182	358	106	29	14	11	5.4
21	10	23	111	101	310	174	360	104	28	20	10	5.1
22	10	55	98	91	271	154	352	98	26	16	9.4	5.1
23	10	33	90	78	304	127	338	92	25	14	8.6	4.9
24	10	28	81	57	238	133	306	86	24	13	7.9	5.1
25	9.9	28	75	59	140	154	304	83	23	12	7.5	5.6
26	9.8	25	68	51	147	170	319	80	22	10	7.2	6.6
27	9.6	23	47	45	136	2100	357	77	21	9.9	7.1	6.4
28	9.6	21	46	50	130	2920	319	74	20	11	7.2	6.1
29	9.6	20	44	39	---	1150	289	69	19	9.0	7.0	6.1
30	9.7	20	41	43	---	767	282	68	18	8.6	7.2	6.0
31	10	---	35	53	---	548	---	64	---	8.1	7.4	---
TOTAL	274.0	681	2465	2916	4124	12755	11677	4442	1044	416.6	255.5	172.0
MEAN	8.84	22.7	79.5	94.1	147	411	389	143	34.8	13.4	8.24	5.73
MAX	10	78	990	239	310	2920	501	268	60	20	12	7.2
MIN	7.8	11	16	30	49	117	282	64	18	8.1	6.6	3.4
AC-FT	543	1350	4890	5780	8180	25300	23160	8810	2070	826	507	341

CAL YR 1978 TOTAL 116646.9 MEAN 320 MAX 11000 MIN 6.1 AC-FT 231400
WTR YR 1979 TOTAL 41222.1 MEAN 113 MAX 2920 MIN 3.4 AC-FT 81760

10260620 HOUSTON CREEK ABOVE LAKE GREGORY AT CRESTLINE, CA

LOCATION.--Lat 34°14'33", long 117°16'48", in NW¼NE¼SE¼ sec.22, T.2 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on left bank 0.1 mi (0.2 km) east of Wildrose Road and 0.1 mi (0.2 km) southeast of intersection of Lake Gregory Road and Wildrose Road, and 0.3 mi (0.5 km) east of Crestline.

DRAINAGE AREA.--0.35 mi^3 (0. 91 km^2).

PERIOD OF RECORD.--March 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,540 ft (1,384 m), from topographic map.

REMARKS.--Records fair. No regulation above station. Miscellaneous measurements made prior to the start of the continuous record are listed below.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period March to September 1979, 105 ft^3/s (2.97 m^3/s) Mar. 27; minimum daily, 0.01 ft^3/s (<0.001 m^3/s) Sept. 24-30.

DISCHARGE MEASUREMENTS, WATER YEARS OCTOBER 1977 TO SEPTEMBER 1979

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)
WATER YEAR 1978			
May 17	1230	0.74	0.021
June 16	0930	0.19	0.005
July 12	1200	0.09	0.003
Aug. 8	1410	0.02	0.001
Sept. 6	1005	1.00	0.028
Sept. 19	1210	0.03	0.001
WATER YEAR 1979			
Nov. 1	1100	0.01	<0.001
Mar. 5	1230	2.8	0.079

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	2.0	.63	.19	.10	.03	.02
2						---	1.9	.99	.19	.13	.03	.02
3						---	2.0	.49	.17	.13	.03	.02
4						---	1.8	.47	.17	.13	.02	.02
5						---	1.7	.41	.17	.12	.02	.02
6						---	1.2	.44	.17	.12	.02	.02
7						---	1.3	.62	.17	.12	.02	.02
8						1.9	1.4	.94	.15	.10	.02	.02
9						1.7	1.4	.46	.15	.10	.02	.02
10						1.5	1.4	.40	.13	.09	.02	.02
11						1.4	1.5	.38	.12	.09	.50	.02
12						1.5	1.4	.32	.11	.09	.10	.02
13						1.5	1.3	.30	.12	.08	.07	.03
14						1.3	1.2	.30	.09	.07	.05	.03
15						2.1	1.1	.27	.09	.07	.04	.03
16						1.4	1.1	.28	.10	.05	.04	.03
17						1.8	1.0	.30	.17	.06	.04	.02
18						1.9	.94	.27	.17	.10	.08	.02
19						1.6	.86	.27	.15	.10	.03	.02
20						1.7	.85	.27	.13	.15	.03	.02
21						1.9	.80	.24	.15	.13	.03	.02
22						2.2	.77	.24	.13	.09	.03	.02
23						1.7	.74	.24	.13	.04	.03	.02
24						1.6	.70	.22	.12	.04	.03	.01
25						1.4	.67	.21	.10	.04	.02	.01
26						1.4	.64	.21	.09	.04	.02	.01
27						22	.61	.21	.09	.04	.02	.01
28						12	.58	.18	.10	.04	.02	.01
29						4.0	.56	.18	.09	.04	.02	.01
30						2.7	.55	.20	.10	.03	.02	.01
31						2.2	---	.20	---	.03	.02	---
TOTAL						---	33.97	11.14	4.01	2.56	1.47	.57
MEAN						---	1.13	.36	.13	.083	.047	.019
MAX						---	2.0	.99	.19	.15	.50	.03
MIN						---	.55	.18	.09	.03	.02	.01
AC-FT						---	67	22	8.0	5.1	2.9	1.1

10260630 ABONDIGAS CREEK ABOVE LAKE GREGORY AT CRESTLINE, CA

LOCATION.--Lat 34°14'16", long 117°15'51", in SE¼SW¼SE¼ sec.23, T.2 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on right bank 80 ft (24 m) north of south gate for San Moritz Park, and 1.4 mi (2.3 km) east of Crestline.

DRAINAGE AREA.--1.15 mi^2 (2.98 km^2).

PERIOD OF RECORD.--March 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,550 ft (1,387 m), from topographic map.

REMARKS.--Records poor. Stage-discharge relation periodically indefinite due to unstable control. Miscellaneous measurements made prior to the start of the continuous record are listed below.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period March to September 1979, 127 ft^3/s (3.60 m^3/s) Mar. 27, gage height, 6.13 ft (1.868 m); no flow many days in September.

DISCHARGE MEASUREMENTS, WATER YEARS OCTOBER 1977 TO SETPEMBER 1979

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)
WATER YEAR 1978			
May 17	1330	1.9	0.053
June 16	1100	0.81	0.023
July 12	1400	0.36	0.010
Aug. 8	1430	0.07	0.002
Sept. 6	1100	1.3	0.034
Sept. 19	1300	0.17	0.005
Sept. 29	1230	0.20	0.006
WATER YEAR 1979			
Nov. 1	1030	0.12	0.003
Mar. 5	1600	5.5	0.16

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	7.0	2.3	.61	.23	.04	.03
2						---	6.4	4.3	.61	.30	.03	.02
3						---	5.9	3.0	.54	.29	.02	.02
4						---	5.4	2.7	.50	.27	.02	.02
5						---	5.3	2.4	.47	.25	.03	.01
6						---	5.2	2.7	.43	.25	.03	.01
7						---	4.9	3.1	.40	.24	.03	.01
8						7.0	5.0	4.5	.38	.23	.03	.01
9						5.2	5.1	3.3	.36	.22	.02	.01
10						4.9	5.4	2.9	.34	.22	.02	.01
11						5.3	5.4	2.7	.32	.30	.04	.00
12						4.8	4.6	2.4	.30	.27	.05	.00
13						4.7	4.6	2.1	.29	.24	.05	.00
14						3.8	4.6	1.9	.27	.20	.04	.00
15						5.5	4.6	1.7	.26	.18	.04	.00
16						4.6	4.1	1.7	.32	.16	.03	.00
17						4.1	4.4	1.6	.50	.14	.03	.00
18						6.3	4.1	1.4	.40	.13	.03	.00
19						5.9	3.7	1.4	.33	.30	.04	.00
20						5.2	3.1	1.5	.35	.25	.04	.00
21						4.6	2.9	1.4	.30	.20	.03	.00
22						4.1	2.9	1.1	.32	.15	.03	.00
23						3.6	2.7	.98	.40	.12	.02	.00
24						3.3	2.6	1.0	.34	.10	.02	.00
25						3.2	2.4	.81	.30	.08	.02	.00
26						7.6	2.2	.81	.27	.07	.02	.00
27						64	2.1	.90	.25	.06	.02	.00
28						33	2.0	1.2	.24	.05	.03	.00
29						16	1.8	1.0	.22	.04	.04	.00
30						9.8	1.9	.90	.22	.04	.04	.00
31						8.8	---	.74	---	.03	.03	---
TOTAL						---	122.3	60.44	10.84	5.61	.96	.15
MEAN						---	4.08	1.95	.36	.18	.031	.005
MAX						---	7.0	4.5	.61	.30	.05	.03
MIN						---	1.8	.74	.22	.03	.02	.00
AC-FT						---	243	120	22	11	1.9	.3

10260640 LAKE GREGORY AT CRESTLINE, CA

LOCATION.--Lat 34°14'35", long 117°16'22", in NE¼NW¼SW¼ sec.23, T.2 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, in boathouse on north side of Lake Gregory, 0.8 mi (1.3 km) east of Lake Gregory Drive, and 0.9 mi (1.5 km) east of Crestline.

DRAINAGE AREA.--2.66 mi² (6.89 km²).

PERIOD OF RECORD.--August 1978 to current year. Records for September 1966 through November 1971 in files of California Department of Water Resources.

GAGE.--Water-stage recorder. Datum of gage is 4,510.00 ft (1,374.648 m) National Geodetic Vertical Datum of 1929 (levels by California Department of Water Resources).

REMARKS.--Lake is formed by earth-type dam. Dam was completed to a height of 90 ft (27.4 m) in 1938. Capacity table developed from survey dated 1892 (furnished by California Department of Water Resources). Capacity is 2,120 acre-ft (2.61 hm³) below spillway elevation, 4,517.0 ft (1,376.78 m). Water is released from lake to Houston Creek for eventual water supply and recreational use in Silverwood Lake, 4.5 mi (7.2 km) downstream. Spillway elevation is raised by addition of splashboards to accommodate summer recreational use.

EXTREMES FOR CURRENT PERIOD.--August to September 1978. Maximum contents, 2,270 acre-ft (2.80 hm³) Sept. 6, elevation, 4,518.88 ft (1,377.355 m); minimum, 2,150 acre-ft (2.65 hm³) Sept. 30, elevation, 4,517.32 ft (1,376.880 m).

Water year 1979: Maximum contents, 2,320 acre-ft (2.86 hm³) Apr. 30 and May 2, elevation, 4,519.49 ft (1,377.540 m); minimum, 2,120 acre-ft (2.61 hm³) Oct. 30, elevation, 4,517.01 ft (1,376.785 m).

MONTHEND ELEVATION, NGVD, AND CONTENTS, AT 0800 HRS, WATER YEARS OCTOBER 1977 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Aug. 31	4,518.31	2,230	--
Sept. 30	4,517.41	2,150	-80
WTR YR 1978	--	--	--
Oct. 31	4,517.04	2,120	-30
Nov. 30	4,517.19	2,130	+10
Dec. 31	4,517.26	2,140	+10
CAL YR 1978	--	--	--
Jan. 31	4,517.42	2,150	+10
Feb. 28	*4,517.42	2,150	0
Mar. 31	4,517.52	2,160	+10
Apr. 30	4,519.49	2,320	+160
May 31	4,519.14	2,290	-30
June 30	4,518.76	2,260	-30
July 31	4,518.62	2,250	-10
Aug. 31	4,518.34	2,230	-20
Sept. 30	4,518.04	2,200	-30
WTR YR 1979	--	+80	+80

* 0800 hr reading from observer on Mar. 1.

10260650 HOUSTON CREEK BELOW LAKE GREGORY AT CRESTLINE, CA

LOCATION.--Lat 34°14'54", long 117°16'05", SW¼NE¼NW¼ sec.23, T.2 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on left bank of channel on Camp Switzerland campgrounds, 0.2 mi (0.3 km) downstream from Lake Gregory spillway, 0.5 mi (0.8 km) east of the intersection of Gregory Lake Road and Lake Gregory Drive, and 1.2 mi (1.9 km) northeast of Crestline.

DRAINAGE AREA.--2.68 mi^2 (6.94 km^2).

PERIOD OF RECORD.--March 1979 to September 1979.

GAGE.--Water-stage recorder. Altitude of gage is 4,440 ft (1,353 m), from topographic map.

REMARKS.--Records good. Flow regulated by Lake Gregory (10260640) 0.2 mi (0.3 km) upstream, usable capacity, 2,120 acre-ft (2.61 hm^3). Miscellaneous measurements made prior to the start of the continuous record are listed below.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period March to September 1979, 183 ft^3/s (5.18 m^3/s) Mar. 27, gage height, 6.35 ft (1.935 m); minimum daily, 0.04 ft^3/s (0.001 m^3/s) many days in July, August and September.

DISCHARGE MEASUREMENTS, WATER YEARS OCTOBER 1977 TO SEPTEMBER 1979

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)
WATER YEAR 1978			
May 17	1430	0.12	0.003
June 16	1245	0.63	0.018
Aug. 8	1500	0.06	0.002
Sept. 6	1200	3.5	0.099
Sept. 29	0915	1.0	0.028
Sept. 29	1000	15	0.43
Sept. 29	1130	46	1.30
WATER YEAR 1979			
Nov. 1	1145	0.05	0.001

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	13	5.8	.07	.07	.05	.04
2						---	12	5.7	.07	.07	.04	.04
3						---	11	5.4	.07	.07	.05	.04
4						---	10	5.2	.08	.07	.04	.04
5						---	10	5.2	.07	.07	.04	.04
6						---	9.7	5.1	.11	.07	.04	.04
7						---	9.1	6.4	.14	.07	.04	.04
8						12	8.6	8.0	.12	.07	.04	.04
9						12	8.7	7.8	.13	.06	.04	.04
10						11	7.9	7.9	.15	.04	.04	.04
11						11	3.7	7.7	.20	.04	.04	.04
12						10	.21	7.9	.25	.04	.04	.04
13						11	.16	8.0	.23	.04	.04	.04
14						11	.14	7.8	.25	.04	.04	.04
15						10	.12	7.8	.21	.04	.04	.04
16						13	.12	7.7	.16	.04	.04	.04
17						12	.11	7.1	.15	.04	.04	.04
18						12	.10	3.8	.13	.04	.04	.04
19						13	.10	.25	.17	.04	.04	.04
20						11	.10	.25	.17	.04	.04	.04
21						11	.10	.24	.64	.05	.04	.04
22						11	.09	.23	1.2	.04	.04	.04
23						11	.09	.22	1.2	.04	.04	.04
24						10	.09	.23	1.2	.04	.04	.04
25						10	.09	.23	1.2	.04	.04	.04
26						9.8	.09	.22	1.2	.04	.04	.04
27						78	.09	.15	.74	.04	.04	.04
28						89	.39	.11	.06	.05	.06	.04
29						31	1.0	.10	.06	.05	.04	.04
30						19	4.0	.08	.06	.05	.04	.04
31						16	---	.08	---	.05	.04	---
TOTAL						---	110.89	122.69	10.49	1.55	1.28	1.20
MEAN						---	3.70	3.96	.35	.050	.041	.040
MAX						---	13	8.0	1.2	.07	.06	.04
MIN						---	.09	.08	.06	.04	.04	.04
AC-FT						---	220	243	21	3.1	2.5	2.4

10261000 WEST FORK MOJAVE RIVER NEAR HESPERIA, CA

LOCATION.--Lat 34°20'20", long 117°15'25", in NW¼NW¼ sec.24, T.3 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on left bank on upstream wingwall of concrete double box culvert on Arrowhead Lake Road, 0.1 mi (0.2 km) northeast of junction with Highway 174, 4.5 mi (7.2 km) downstream from Cedar Springs Dam, and 6.5 mi (10.5 km) southeast of Hesperia.

DRAINAGE AREA.--70.3 mi² (182 km²).

PERIOD OF RECORD.--October 1904 to September 1922, October 1929 to September 1971, October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,040 ft (927 m), from topographic map. Prior to June 30, 1922, nonrecording gage or water-stage recorder 1.6 mi (2.6 km) downstream at different datum. June 30, 1922 to September 1971, water-stage recorder 1.5 mi (2.4 km) downstream at different datum. June 30, 1942 to April 14, 1966, at datum 2.00 ft (0.610 m) higher than datum then in use.

REMARKS.--Records good. Since 1972 regulated by Cedar Springs Dam, total capacity, 78,000 acre-ft (96.2 hm³), 4.5 mi (7.24 km) upstream.

AVERAGE DISCHARGE.--65 years (water years 1905-22, 1930-71, 1975-79), 48.5 ft³/s (1.374 m³/s), 35,140 acre-ft/yr (43.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,100 ft³/s (739 m³/s) Mar. 2, 1938, gage height unknown, on basis of slope-area measurement of maximum flow; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,180 ft³/s (33.4 m³/s) Mar. 28, gage height, 4.58 ft (1.396 m); no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	3.3	17	133	69	412	42	0			
2		0	3.5	14	71	96	398	44	0			
3		0	2.2	14	87	64	318	39	0			
4		0	2.5	13	65	64	310	37	0			
5		0	3.0	41	37	64	291	34	0			
6		0	3.3	188	12	82	256	37	0			
7		0	2.5	102	17	89	218	34	0			
8		0	2.3	89	14	87	172	31	0			
9		0	2.3	89	15	80	115	27	0			
10		0	2.5	56	14	69	84	24	0			
11		0	2.0	23	12	60	78	11	7.0			
12		.34	1.4	5.9	12	67	96	1.0	22			
13		.44	1.6	5.0	40	84	150	.85	23			
14		.84	2.2	5.3	118	121	140	.74	24			
15		1.1	2.5	133	118	124	96	.57	26			
16		1.4	2.7	344	102	130	99	.51	28			
17		.99	49	288	87	130	89	.43	26			
18		.22	448	184	80	130	89	.68	13			
19		.20	328	124	53	110	91	.60	0			
20		.01	89	62	34	89	71	.43	0			
21		.15	44	67	290	89	36	0	0			
22		3.3	33	60	218	87	33	0	0			
23		2.5	37	44	168	73	32	0	0			
24		2.3	36	55	140	55	26	0	0			
25		2.7	33	56	115	55	24	0	0			
26		2.5	28	27	107	51	15	0	0			
27		2.5	28	6.3	96	596	21	0	0			
28		2.7	22	7.4	62	883	18	0	0			
29		2.8	19	7.0	---	591	25	0	0			
30		3.0	18	8.2	---	434	39	0	0			
31		---	17	76	---	426	---	0	---			---
TOTAL	0	29.99	1268.8	2211.1	2317	5149	3842	365.81	169.0	0	0	0
MEAN	0	1.00	40.9	71.3	82.8	166	128	11.8	5.63	0	0	0
MAX	0	3.3	448	344	290	883	412	44	28	0	0	0
MIN	0	0	1.4	5.0	12	51	15	0	0	0	0	0
AC-FT	0	59	2520	4390	4600	10210	7620	726	335	0	0	0

CAL YR 1978 TOTAL 67164.67 MEAN 184 MAX 4900 MIN 0 AC-FT 133200
WTR YR 1979 TOTAL 15352.70 MEAN 42.1 MAX 883 MIN 0 AC-FT 30450

10261100 MOJAVE RIVER BELOW FORKS RESERVOIR, NEAR HESPERIA, CA

WATER-QUALITY RECORDS

LOCATION.--Lat 34°20'38", long 117°14'15", in SW¼NE¼SW¼ sec.18, T.3 N., R.3 W., San Bernardino County, Hydrologic Unit 18090208, on left bank of reservoir outlet channel, 6.5 mi (10.5 km) southeast of Hesperia.

DRAINAGE AREA.--211 mi² (546 km²).

PERIOD OF RECORD.--Water years 1967-71, 1974 to current year.
CHEMICAL ANALYSES: Water years 1967-71, 1974 to current year.

COOPERATION.--Chemical analyses were furnished by California Department of Water Resources; discharges were furnished by Corps of Engineers.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
NOV 30...	1705	E25	320	8.2	10.0	2	9.9	110	31	6.9	31
JAN 24...	1255	E60	300	8.5	7.0	3	10.4	80	24	5.0	25
APR 18...	1405	E80	150	8.4	12.0	3	9.7	48	14	3.0	12
MAY 16...	1320	E65	--	--	18.0	--	--	--	--	--	--
JUL 17...	1100	E10	250	8.2	27.0	0	7.0	79	25	4.0	26

DATE	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)
NOV 30...	38	1.3	2.0	100	24	29	.6	204	.41	1.8
JAN 24...	40	1.2	1.0	78	21	26	.3	157	.54	2.4
APR 18...	35	.8	1.0	52	8.0	10	.1	79	.14	.60
MAY 16...	--	--	--	--	--	--	--	--	--	--
JUL 17...	39	1.2	2.0	100	21	6.0	1.3	196	.05	.20

DATE	TIME	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 30...	1705	--	0	--	--	--	--	--	--
JAN 24...	1255	--	100	--	--	--	--	--	--
APR 18...	1405	--	100	--	--	--	--	--	--
MAY 16...	1320	0	--	0	10	50	0	.0	0
JUL 17...	1100	--	100	--	--	--	--	--	--

E Estimated

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA

(National stream-quality accounting network station)

LOCATION.--Lat 34°34'23", long 117°19'11", in SW¼SW¼SE¼ sec.29, T.6 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on left bank 650 ft (198 m) upstream from bridge on county road, formerly U.S. Highway 66, 0.6 mi (1.0 km) downstream from Atchison, Topeka, and Santa Fe Railway bridge, 3 mi (5 km) northwest of Victorville, 28 mi (45 km) downstream from Mojave River Forks Reservoir, and 33 mi (53 km) downstream from Silverwood Lake.

DRAINAGE AREA.--513 mi^2 (1,329 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1899 to September 1906, October 1930 to current year. Monthly discharge only for January to September 1906, October, November 1930, published in WSP 1314. Prior to October 1936, published as "at Victorville" and as "near Victorville" in 1937.

GAGE.--Water-stage recorder. Datum of gage is 2,643.01 ft (805.589 m) National Geodetic Vertical Datum of 1929. See WSP 1314 for history of gage changes prior to Mar. 28, 1938. Mar. 28, 1938, to Apr. 14, 1966, at site 350 ft (107 m) upstream at datum 5.00 ft (1.524 m) higher; Apr. 14, 1966, to July 17, 1969, at site 350 ft (107 m) upstream at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records poor. Regulation by Silverwood Lake, capacity, 78,000 acre-ft (96.2 hm^3) used for the storage and distribution of imported water and recreation, and by Mojave Forks Reservoir since June 1970, capacity, 89,700 acre-ft (111 hm^3) with ungated opening, capacity, 23,500 ft^3/s (666 m^3/s). Diversions and pumping for irrigation of about 5,000 acres (20.2 km^2) and Mojave State Fish Hatchery (since 1970) above station.

AVERAGE DISCHARGE.--56 years (water years 1900-06, 1931-79), 75.4 ft^3/s (2.135 m^3/s), 54,630 acre-ft/yr (67.4 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 70,600 ft^3/s (2,000 m^3/s) Mar. 2, 1938, gage height, 23.7 ft (7.22 m), present datum, from rating curve extended above 10,000 ft^3/s (283 m^3/s) on basis of slope-area measurement of maximum flow; minimum daily, 3.4 ft^3/s (0.096 m^3/s) July 25, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,450 ft^3/s (126 m^3/s) Mar. 28, gage height, 6.88 ft (2.097 m); minimum daily, 10 ft^3/s (0.28 m^3/s) July 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	39	41	37	65	162	948	174	25	25	18	29
2	26	36	41	36	49	192	885	178	30	27	16	29
3	29	36	48	35	59	140	651	158	27	27	18	29
4	26	36	44	40	59	120	410	155	26	25	16	31
5	26	34	38	52	43	114	425	143	30	23	20	30
6	27	39	34	50	43	126	440	155	27	24	19	34
7	27	35	39	45	43	178	455	133	26	24	21	30
8	30	30	38	42	43	225	425	114	25	30	21	27
9	34	30	43	40	44	251	479	111	20	26	21	31
10	35	31	41	45	43	258	354	91	19	16	21	35
11	32	32	41	48	38	280	297	80	23	15	24	35
12	30	31	38	46	38	300	291	71	27	18	23	34
13	32	31	36	44	35	278	334	76	19	17	23	34
14	34	32	38	42	38	260	410	70	21	18	23	34
15	34	33	44	45	237	273	530	61	19	20	20	33
16	34	35	46	43	183	279	448	56	17	17	18	32
17	30	36	46	47	151	245	417	49	17	13	20	33
18	30	38	51	45	130	251	334	40	18	13	25	33
19	34	35	44	43	114	220	297	31	17	10	27	38
20	41	36	36	41	81	205	297	25	17	14	31	36
21	36	41	36	40	272	158	256	23	18	15	25	33
22	36	36	39	40	622	151	225	28	19	15	25	31
23	30	43	41	41	513	130	251	41	18	13	25	30
24	30	48	40	43	381	111	215	24	20	15	26	31
25	32	41	39	45	230	105	178	25	56	15	27	30
26	32	43	38	43	187	126	166	22	45	13	26	28
27	41	46	37	50	192	472	225	24	30	16	32	27
28	38	36	36	47	187	2330	201	31	26	19	35	26
29	38	38	35	52	---	1000	174	31	25	18	32	32
30	36	43	36	60	---	1100	178	24	25	21	31	34
31	38	---	36	69	---	1100	---	25	---	19	30	---
TOTAL	1008	1100	1240	1396	4120	11140	11196	2269	732	581	739	949
MEAN	32.5	36.7	40.0	45.0	147	359	373	73.2	24.4	18.7	23.8	31.6
MAX	41	48	51	69	622	2330	948	178	56	30	35	38
MIN	26	30	34	35	35	105	166	22	17	10	16	26
AC-FT	2000	2180	2460	2770	8170	22100	22210	4500	1450	1150	1470	1880

CAL YR 1978 TOTAL 105669 MEAN 290 MAX 9700 MIN 15 AC-FT 209600
WTR YR 1979 TOTAL 36470 MEAN 99.9 MAX 2330 MIN 10 AC-FT 72340

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962-65, 1967 to current year.
CHEMICAL ANALYSES: Water years 1967 to current year; water years 1969-74 (partial-record station).
BIOLOGICAL DATA: Water years 1975 to current year.
WATER TEMPERATURES: Water years 1962-65, 1975 to current year.
SEDIMENT RECORDS: Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1975 to current year.
WATER TEMPERATURES: March 1962 to September 1965, June 1975 to current year.

INSTRUMENTATION.--Specific conductance recorder since June 1975. Temperature recorder from March 1962 to September 1965 and since June 1975.

REMARKS.--Periods of missing conductivity and temperature data due to sand accumulation around probes or equipment malfunction.

COOPERATION.--The letter "A" following a date indicates chemical-quality data that was furnished by California Department of Water Resources.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 726 micromhos Jan. 23, 1976; minimum recorded, 129 micromhos Mar. 27, 1979.
WATER TEMPERATURES: Maximum recorded, 36.0°C Aug. 5, 1978; minimum recorded, 1.0°C Jan. 28, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 688 micromhos Aug. 23; minimum recorded, 129 micromhos Mar. 27, 1979.
WATER TEMPERATURES: Maximum recorded, 35.0°C July 30; minimum recorded, 1.0°C Jan. 28.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT										
19...	1130	35	488	7.6	16.5	--	.70	--	25	130
NOV										
16...	1345	36	463	7.5	14.5	--	.60	9.7	40	83
30... A	1555	43	390	8.2	15.5	2	--	7.9	--	--
DEC										
28...	1515	36	463	7.3	12.5	--	3.2	9.9	K12	34
JAN										
23...	1420	41	437	7.4	15.5	--	3.4	9.6	7	27
24... A	1450	43	440	8.3	13.0	3	--	8.3	--	--
FEB										
27...	1400	193	303	8.1	16.0	--	6.3	8.7	K260	21
MAR										
29...	1240	2450	210	7.2	9.5	--	56	9.7	25	320
APR										
18...	0920	341	215	7.8	11.0	--	7.0	9.4	K15	K20
18... A	1550	--	200	8.1	15.5	6	--	8.3	--	--
MAY										
22...	1750	28	382	7.8	24.0	--	.70	6.1	51	--
JUN										
27...	0945	29	450	8.0	26.0	--	6.4	5.9	68	600
JUL										
17... A	1330	13	410	8.0	35.5	10	--	5.4	--	--
25...	1215	14	468	8.1	34.0	--	1.0	5.9	K36	185
AUG										
23...	1100	26	485	7.7	28.0	--	.60	5.1	--	--
SEP										
27...	1400	24	460	8.0	27.0	--	1.4	--	K26	28

K Results based on colony count outside the acceptable range (non-ideal colony count).

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMPER 1979

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT										
19...	130	0	38	8.0	48	43	1.8	6.6	160	35
NOV										
16...	140	0	41	7.9	46	41	1.7	5.8	150	42
30... A	130	--	39	8.1	42	40	1.6	4.0	150	36
DEC										
28...	120	0	37	7.7	42	41	1.6	5.1	150	35
JAN										
23...	130	0	38	7.8	45	42	1.7	4.4	140	39
24... A	120	--	38	7.0	43	42	1.7	5.0	150	34
FEB										
27...	90	0	26	6.1	29	40	1.3	2.5	91	25
MAR										
29...	63	8	18	4.4	18	37	1.0	1.9	55	16
APR										
18...	61	6	17	4.4	16	36	.9	1.8	55	13
18... A	59	--	17	4.0	18	39	1.0	2.0	70	13
MAY										
22...	110	0	33	7.1	38	41	1.6	5.6	120	30
JUN										
27...	80	0	24	4.9	29	43	1.4	2.6	97	27
JUL										
17... A	120	--	38	7.0	50	46	2.0	4.0	150	37
25...	120	0	35	7.9	50	46	2.0	5.1	160	38
AUG										
23...	130	0	38	8.0	49	44	1.9	4.6	150	41
SEP										
27...	120	0	36	7.6	48	45	1.9	4.8	150	38

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
OCT									
19...	28	.6	26	296	287	--	--	.67	--
NOV									
16...	27	.4	24	279	284	--	--	.72	--
30... A	27	.4	--	222	--	.95	4.2	--	--
DEC									
28...	27	.5	23	278	267	--	--	1.2	--
JAN									
23...	27	.4	23	268	269	--	--	.99	--
24... A	24	.5	--	273	--	1.9	8.4	--	--
FEB									
27...	24	.3	19	181	187	--	--	.81	--
MAR									
29...	17	.2	12	123	121	--	--	.38	--
APR									
18...	12	.2	18	123	116	--	--	.47	--
18... A	12	.1	--	110	--	.41	1.8	--	--
MAY									
22...	23	.5	24	234	233	--	--	1.0	--
JUN									
27...	20	.4	14	197	180	--	--	.73	--
JUL									
17... A	28	.5	--	296	--	1.4	6.0	--	--
25...	31	.5	28	297	292	--	--	.82	--
AUG									
23...	29	.5	28	288	288	--	--	1.2	--
SEP									
27...	25	.5	27	280	281	--	--	1.1	.92

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT									
19...	.39	1.0	1.4	.74	.66	2.1	.55	.50	--
NOV									
16...	.41	.43	.84	.14	.70	1.6	.36	.48	--
30... A	--	--	--	--	--	--	--	--	.24
DEC									
28...	.29	.63	.92	--	--	2.1	.43	.36	--
JAN									
23...	.35	.15	.50	.00	.51	1.5	.30	.25	--
24... A	--	--	--	--	--	--	--	--	.26
FEB									
27...	.11	.32	.43	.01	.42	1.2	.12	.11	--
MAR									
29...	.06	.62	.68	.34	.34	1.1	.21	.04	--
APR									
18...	.11	.23	.34	.05	.29	.81	.08	.08	--
18... A	--	--	--	--	--	--	--	--	.09
MAY									
22...	.40	.17	.57	.00	.62	1.6	.41	.41	--
JUN									
27...	.34	.26	.60	.58	.02	1.3	.30	.28	--
JUL									
17... A	--	--	--	--	--	--	--	--	.31
25...	.20	.42	.62	.16	.46	1.4	.45	.43	--
AUG									
23...	.80	.40	1.2	.86	.34	2.4	.17	.47	--
SEP									
27...	.27	.69	.96	.27	.69	2.1	.64	.50	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
OCT										
19...	1130	2	3	0	0	40	--	8	0	9
NOV										
30... A	1555	--	--	--	--	--	100	--	--	--
JAN										
23...	1420	2	2	0	0	40	--	8	0	13
24... A	1450	--	--	--	--	--	100	--	--	--
APR										
18...	0920	0	0	0	0	30	--	10	0	19
18... A	1550	--	--	--	--	--	100	--	--	--
MAY										
16... A	1500	--	0	--	--	--	--	--	--	0
JUL										
17... A	1330	--	--	--	--	--	100	--	--	--
25...	1215	5	4	100	40	60	--	0	0	<1

< Actual value is known to be less than the value shown.

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
OCT										
19...	0	0	0	0	0	1	6	2	4	430
NOV										
30... A	--	--	--	--	--	--	--	--	--	--
JAN										
23...	0	0	0	1	0	<3	3	1	2	540
24... A	--	--	--	--	--	--	--	--	--	--
APR										
18...	0	0	0	0	0	3	5	3	2	1200
18... A	--	--	--	--	--	--	--	--	--	--
MAY										
16... A	--	--	--	--	--	--	--	--	10	--
JUL										
17... A	--	--	--	--	--	--	--	--	--	--
25...	10	10	0	0	0	<3	32	31	1	590

DATE	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)
OCT										
19...	420	10	--	--	--	50	50	3	.0	.0
NOV										
30... A	--	--	--	--	--	--	--	--	--	--
JAN										
23...	520	20	--	--	--	20	20	5	.0	.0
24... A	--	--	--	--	--	--	--	--	--	--
APR										
18...	1100	60	130	0	130	40	40	5	.0	.0
18... A	--	--	--	--	--	--	--	--	--	--
MAY										
16... A	--	10	--	--	0	--	--	--	.0	--
JUL										
17... A	--	--	--	--	--	--	--	--	--	--
25...	570	20	11	10	1	40	40	4	.1	.0

DATE	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
OCT										
19...	.0	0	0	0	0	0	0	20	20	<3
NOV										
30... A	--	--	--	--	--	--	--	--	--	--
JAN										
23...	.0	0	0	0	1	1	0	20	10	6
24... A	--	--	--	--	--	--	--	--	--	--
APR										
18...	.0	0	0	0	0	0	0	20	10	10
18... A	--	--	--	--	--	--	--	--	--	--
MAY										
16... A	--	--	--	--	--	--	--	--	--	0
JUL										
17... A	--	--	--	--	--	--	--	--	--	--
25...	.1	0	0	0	0	0	0	60	50	6

< Actual value is known to be less than the value shown.

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
OCT					
19...	1130	--	3.8	1.4	--
NOV					
16...	1345	3.6	--	--	--
30... A	1555	--	--	--	.26
DEC					
28...	1515	3.0	--	--	--
JAN					
23...	1420	--	5.0	.4	--
24... A	1450	--	--	--	.25
FEB					
27...	1400	4.3	--	--	--
MAR					
29...	1240	7.1	--	--	--
APR					
18...	0920	--	5.6	--	--
18... A	1550	--	--	--	.04
MAY					
22...	1750	2.4	--	--	--
JUN					
27...	0945	4.1	--	--	--
JUL					
17... A	1330	--	--	--	.14
25...	1215	--	3.8	.6	--
AUG					
23...	1100	4.1	--	--	--
SEP					
27...	1400	3.9	--	--	--

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	OCT 19,78		NOV 16,78		MAR 29,79		MAY 22,79	
TIME	1130		1345		1240		1750	
TOTAL CELLS/ML	1100		1200		1700		190	
DIVERSITY: DIVISION	1.5		1.2		0.7		0.4	
.CLASS	1.8		1.2		0.7		0.4	
..ORDER	1.8		1.6		1.6		1.2	
...FAMILY	2.6		2.4		2.3		1.2	
....GENUS	2.6		0.0		2.6		1.2	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...HYDRODICTYACEAE								
....PEDIASTRUM	230#	22	--	-	--	-	--	-
...OOCYSTACEAE								
....CLOSTERIOPSIS	14	1	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....SCENEDESMUS	230#	22	--	-	--	-	51#	27
..VOLVOCALES								
...CHLAMYDOMONADACEAE	--	-	57	5	--	-	--	-
....CHLAMYDOMONAS	--	-	--	-	--	-	130#	67
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	--	-	850#	51	--	-
....MELOSIRA	--	-	--	-	52	3	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	13	1	--	-
....COCCONEIS	--	-	--	-	26	2	--	-
...CYMBELLACEAE								
....AMPHORA	14	1	--	-	--	-	--	-
....CYMBELLA	--	-	14	1	13	1	--	-
....EPITHEMIA	--	-	--	-	13	1	--	-
....RHOPALODIA	14	1	--	-	--	-	--	-
...DIATOMACEAE								
....DIATOMA	--	-	--	-	26	2	--	-
...FRAGILARIACEAE								
....FRAGILARIA	--	-	14	1	150	9	--	-
....SYNEDRA	14	1	14	1	13	1	--	-
...MERIDIONACEAE								
....MERIDION	--	-	--	-	26	2	--	-
...NAVICULACEAE								
....GYROSIGMA	--	-	--	-	--	-	--	-
....NAVICULA	43	4	140	12	130	8	--	-
...NITZSCHIACEAE								
....NITZSCHIA	120	11	57	5	52	3	--	-
...SURIRELLACEAE								
....SURIRELLA	--	-	--	-	13	1	--	-
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...OCHROMONADACEAE								
....OCHROMONAS	72	7	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	29	2	--	-	13	7
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....AGMENELLUM	--	-	--	-	--	-	--	-
....ANACYSTIS	--	-	110	10	77	5	--	-
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	--	-	140	12	190	12	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	320#	30	--	-	--	-	--	-
....PHORMIDIUM	--	-	590#	49	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....TRACHELOMONAS	--	-	14	1	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..PERIDINIALES								
...GLENODINIACEAE								
....GLENODINIUM	--	-	--	-	13	1	--	-

See footnotes at end of table.

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	JUN 27,79	JUL 25,79	AUG 23,79	SEP 27,79
TIME	0945	1215	1100	1400
TOTAL CELLS/ML	1600	3700	2200	2100
DIVERSITY: DIVISION	1.1	0.9	1.7	0.4
.CLASS	1.1	0.9	1.7	0.4
..ORDER	1.4	1.1	2.1	0.6
...FAMILY	1.9	1.3	2.2	1.4
....GENUS	2.0	1.3	2.2	1.4

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...HYDRODICTYACEAE								
....PEDIASTRUM	190	12	410	11	640#	30	--	-
...OOCYSTACEAE								
....CLOSTERIOPSIS	--	-	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	77	2	--	-	--	-
...SCENEDESMACEAE								
....SCENEDESMUS	850#	53	100	3	--	-	78	4
..VOLVOCALES								
...CHLAMYDOMONADACEAE	--	-	--	-	--	-	--	-
....CHLAMYDOMONAS	13	1	--	-	--	-	13	1
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	--	-	--	-	--	-
....MELOSIRA	--	-	--	-	530#	24	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	--	-	--	-
....COCCONEIS	--	-	--	-	--	-	13	1
...CYMBELLACEAE								
....AMPHORA	--	-	--	-	--	-	--	-
....CYMBELLA	--	-	--	-	--	-	--	-
....EPITHEMIA	--	-	--	-	--	-	--	-
....RHOPALODIA	--	-	--	-	--	-	--	-
...DIATOMACEAE								
....DIATOMA	--	-	--	-	--	-	--	-
...FRAGILARIACEAE								
....FRAGILARIA	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	--	-	--	-
...MERIDIONACEAE								
....MERIDION	--	-	--	-	--	-	--	-
...NAVICULACEAE								
....GYROSIGMA	--	-	--	-	13	1	--	-
....NAVICULA	--	-	*	0	39	2	13	1
...NITZSCHIACEAE								
....NITZSCHIA	13	1	52	1	120	5	--	-
...SURIRELLACEAE								
....SURIRELLA	--	-	--	-	--	-	--	-
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...OCHROMONADACEAE								
....OCHROMONAS	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOMONADACEAE								
....CRYPTOMONAS	26	2	120	3	26	1	26	1
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....AGMENELLUM	260#	16	--	-	--	-	--	-
....ANACYSTIS	52	3	64	2	100	5	39	2
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	190	12	--	-	--	-	1300#	62
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	2900#	78	690#	32	620#	30
....PHORMIDIUM	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....TRACHELOMONAS	--	-	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..PERIDINIALES								
...GLENODINIACEAE								
....GLENODINIUM	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PERIPHYTON

DATE	TIME	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	LENGTH OF EXPOSURE (DAYS)
OCT						
19...	1130	1.06	.320	.394	.236	19
DEC						
28...	1515	13.7	.000	6.30	4.49	42
APR						
18...	0920	26.1	.100	35.5	31.4	20
MAY						
22...	1750	2.40	.030	2.64	1.20	36
JUN						
27...	0945	.069	.015	.119	.080	36
JUL						
25...	1215	.092	.009	.066	.032	28

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	512	476	493	476	436	452	470	434	447	---	---	---
2	513	471	493	468	436	449	476	436	450	---	---	---
3	506	466	490	476	440	451	510	420	451	---	---	---
4	503	467	487	480	434	448	516	404	450	---	---	---
5	510	470	490	472	432	448	472	420	446	536	368	474
6	507	461	485	478	440	452	---	---	---	458	416	441
7	506	470	489	466	432	445	---	---	---	446	410	426
8	503	465	490	484	438	454	---	---	---	434	390	408
9	504	464	484	478	438	450	---	---	---	406	386	397
10	501	457	479	478	444	458	---	---	---	418	380	396
11	504	452	477	484	448	462	---	---	---	418	376	389
12	507	469	485	482	450	462	---	---	---	410	370	387
13	512	474	491	486	444	459	---	---	---	408	370	388
14	517	475	492	480	448	460	478	432	454	414	370	386
15	520	478	499	480	448	459	---	---	---	438	364	387
16	523	483	501	476	428	456	---	---	---	386	356	369
17	520	486	499	478	436	455	472	426	449	388	270	356
18	519	487	497	478	436	453	470	438	448	378	336	358
19	523	468	494	472	438	450	452	354	429	382	336	355
20	516	468	490	476	428	451	---	---	---	368	336	359
21	507	465	481	468	428	449	---	---	---	410	222	357
22	503	455	470	480	424	451	---	---	---	434	232	343
23	498	454	468	476	424	450	---	---	---	482	256	398
24	505	455	475	478	442	452	524	408	449	466	256	412
25	506	460	477	484	420	447	468	336	462	465	399	426
26	490	448	464	480	422	452	464	406	445	---	---	---
27	486	440	458	478	428	451	482	416	452	---	---	---
28	476	436	452	474	426	448	474	430	459	446	414	426
29	478	432	445	468	430	445	484	442	464	---	---	---
30	476	436	446	464	428	442	478	436	460	---	---	---
31	472	440	451	---	---	---	---	---	---	---	---	---
MONTH	523	432	480	486	420	452	---	---	---	---	---	---

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	337	297	310	---	---	---	444	270	342
2	---	---	---	345	299	312	---	---	---	462	382	413
3	---	---	---	342	302	316	---	---	---	428	290	337
4	---	---	---	350	294	317	---	---	---	388	264	327
5	---	---	---	338	304	319	---	---	---	376	238	305
6	---	---	---	358	304	324	---	---	---	380	308	333
7	432	382	400	350	284	310	---	---	---	332	188	244
8	441	389	406	326	262	290	257	195	215	254	196	218
9	441	397	413	313	257	274	318	202	255	268	188	221
10	446	406	419	317	229	266	---	---	---	244	136	185
11	450	400	418	299	225	241	---	---	---	244	138	180
12	431	405	416	257	205	235	---	---	---	258	160	197
13	459	415	427	287	217	239	---	---	---	432	168	288
14	457	423	434	271	203	237	---	---	---	432	338	387
15	458	388	423	270	198	232	---	---	---	504	336	396
16	410	356	385	272	214	238	---	---	---	474	314	366
17	387	345	359	270	222	232	261	201	219	460	336	399
18	379	309	338	270	210	234	256	141	208	402	330	364
19	346	312	324	260	216	230	252	194	209	516	368	457
20	362	318	335	268	214	233	314	220	254	554	360	467
21	356	274	321	263	213	233	316	234	267	520	362	432
22	319	261	275	263	221	234	316	222	264	512	312	447
23	287	245	267	273	223	238	354	246	285	453	353	408
24	306	258	273	283	221	244	348	276	299	432	356	380
25	306	262	274	291	227	244	286	230	266	483	401	445
26	315	275	287	299	231	247	466	232	348	443	369	405
27	339	291	306	299	129	251	486	390	442	484	384	428
28	349	287	309	---	---	---	466	324	421	557	389	516
29	---	---	---	---	---	---	530	270	376	546	428	509
30	---	---	---	---	---	---	470	288	384	457	401	423
31	---	---	---	---	---	---	---	---	---	546	436	494
MONTH	459	245	355	358	129	262	---	---	---	557	136	385

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	535	431	489	527	439	481	499	457	479	474	414	443
2	569	499	528	533	453	489	488	444	466	466	414	444
3	556	398	484	516	452	487	498	458	477	476	406	447
4	529	467	496	535	449	483	494	458	472	464	412	439
5	556	472	521	552	478	511	504	466	487	472	412	441
6	549	401	496	533	455	500	532	482	507	470	410	442
7	552	410	519	516	458	484	529	489	509	466	422	446
8	569	511	536	515	451	491	517	487	497	470	432	454
9	538	392	481	510	426	474	519	477	498	476	420	454
10	494	366	417	449	387	419	519	491	503	480	418	450
11	527	385	488	455	371	410	594	496	549	466	420	444
12	526	364	461	460	386	425	606	540	579	468	416	449
13	477	357	423	429	365	405	604	510	563	468	416	443
14	536	384	478	422	366	390	584	518	550	466	426	442
15	507	389	459	447	357	401	570	508	535	464	424	444
16	512	366	445	468	378	417	557	511	532	462	410	436
17	514	410	486	441	357	410	587	529	562	456	426	439
18	513	459	486	418	346	379	663	563	583	454	414	436
19	506	428	478	377	333	355	685	543	605	446	396	419
20	481	373	439	420	364	388	595	499	554	452	406	427
21	478	374	428	410	336	380	526	498	508	452	396	432
22	457	371	418	517	349	416	506	466	490	450	394	423
23	470	408	449	414	346	378	688	408	465	448	382	424
24	470	362	434	475	339	414	474	414	442	442	382	414
25	463	359	429	524	388	452	476	402	445	444	378	417
26	448	364	410	494	430	461	482	406	447	446	394	420
27	559	251	487	490	442	463	478	410	441	518	412	468
28	560	496	529	507	453	476	470	422	446	510	446	474
29	551	469	513	509	455	473	472	418	444	511	459	480
30	528	468	490	583	469	524	474	418	446	504	446	475
31	---	---	---	523	467	497	478	416	449	---	---	---
MONTH	569	251	473	583	333	443	688	402	501	518	378	442
YEAR	688	129	416									

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	28.0	15.0	20.5	19.0	9.5	13.0	12.5	8.0	10.0	8.0	4.0	5.0
2	27.5	15.0	20.5	16.0	9.0	12.0	13.0	6.5	9.0	8.0	4.0	5.5
3	27.0	15.0	20.5	19.0	8.0	12.5	12.0	5.0	7.5	6.5	4.5	5.5
4	28.0	15.5	20.5	20.5	9.0	13.5	11.5	5.5	8.0	9.0	4.5	6.0
5	27.5	15.5	20.5	19.0	9.5	13.0	10.5	6.0	8.0	7.5	4.5	6.0
6	26.0	16.0	20.5	19.5	8.5	13.0	8.5	5.0	6.0	9.0	6.0	7.0
7	27.0	15.0	20.0	19.5	8.5	13.5	7.5	4.5	5.5	11.5	6.0	8.0
8	24.0	16.0	19.5	20.0	8.5	13.5	7.0	4.0	5.0	13.5	6.5	9.0
9	24.5	15.5	19.0	17.5	9.0	12.5	7.0	3.0	5.0	13.0	6.5	9.0
10	22.5	15.0	18.5	15.0	10.0	12.5	9.5	4.5	6.5	13.5	5.0	8.5
11	22.0	14.0	18.0	14.0	8.5	10.5	10.5	5.0	7.0	15.0	6.5	10.0
12	25.5	13.5	18.5	15.0	6.0	9.5	10.0	5.0	7.0	13.5	6.5	9.0
13	24.5	13.0	18.0	12.0	6.5	9.0	11.5	5.0	7.0	14.0	4.5	8.5
14	25.0	13.0	18.0	13.5	7.5	10.0	11.5	4.5	7.0	8.5	6.0	7.0
15	24.0	14.0	18.0	14.5	5.0	9.0	9.5	5.0	6.5	10.0	6.0	7.5
16	24.0	12.5	17.0	13.5	5.5	9.0	10.0	5.0	7.0	10.5	7.0	8.5
17	22.5	12.5	17.0	15.0	6.0	9.5	11.0	8.0	9.0	14.5	7.0	9.5
18	23.5	12.5	17.0	16.5	6.0	10.0	9.5	6.5	8.5	14.0	5.5	8.0
19	15.0	12.0	13.5	16.0	6.0	10.0	10.5	5.0	7.0	14.0	4.0	7.5
20	20.5	15.0	17.5	15.0	6.0	9.5	9.5	4.5	6.5	14.0	4.5	7.5
21	21.5	14.0	17.0	12.0	7.5	9.5	9.5	4.0	6.5	11.0	5.5	7.5
22	21.0	12.5	15.5	12.5	7.5	9.5	10.0	5.0	6.5	14.0	4.5	8.0
23	18.5	12.0	14.5	14.5	9.0	11.0	10.5	5.0	7.0	14.5	4.5	8.5
24	22.5	12.0	16.5	11.5	8.0	10.0	10.0	5.0	7.0	13.0	6.5	8.5
25	22.5	12.5	16.0	13.5	7.0	9.5	10.5	5.5	7.0	9.5	4.0	6.0
26	22.0	10.5	15.5	13.0	6.5	9.0	10.5	5.0	7.0	12.0	2.5	6.0
27	22.5	10.0	15.0	11.5	5.5	8.0	10.5	5.5	7.5	12.0	3.0	6.5
28	20.5	10.5	14.5	13.0	4.0	7.5	12.0	6.0	8.0	9.5	4.0	5.5
29	21.5	10.0	14.5	15.0	5.5	9.5	11.5	5.5	8.0	10.5	1.0	5.0
30	18.0	10.5	13.5	16.0	7.0	10.5	10.0	4.5	6.5	8.5	3.5	5.5
31	19.0	10.0	13.5	---	---	---	10.0	4.5	6.0	8.0	2.0	4.0
MONTH	28.0	10.0	17.5	20.5	4.0	10.5	13.0	3.0	7.0	15.0	1.0	7.0

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.0	3.5	7.0	8.5	5.0	7.5	15.0	10.0	12.5	---	---	---
2	11.0	4.5	7.0	15.0	3.5	9.0	15.0	10.5	12.5	---	---	---
3	14.0	4.0	7.5	18.0	4.5	10.5	17.5	9.0	13.0	---	---	---
4	14.0	1.5	6.5	19.5	6.5	12.0	19.5	8.5	14.5	---	---	---
5	13.5	2.5	7.0	19.5	6.5	12.0	21.0	10.0	15.5	---	---	---
6	15.5	3.5	8.0	20.5	7.5	13.0	18.0	8.5	14.0	---	---	---
7	16.0	4.5	9.0	21.5	8.0	14.0	18.5	9.5	13.5	---	---	---
8	17.0	4.5	9.5	22.0	9.0	15.0	20.5	10.0	15.0	---	---	---
9	16.5	4.5	9.0	18.0	10.5	13.5	16.0	10.0	12.5	---	---	---
10	17.5	4.5	9.5	19.0	8.5	13.0	15.0	6.0	10.0	---	---	---
11	18.5	5.5	10.5	20.5	8.5	14.0	18.0	7.0	11.5	---	---	---
12	17.0	6.0	10.0	20.0	9.0	14.0	20.5	7.0	14.0	---	---	---
13	16.0	6.0	9.5	16.5	10.5	13.0	20.5	9.5	15.5	---	---	---
14	15.5	7.0	10.0	18.5	9.5	13.0	22.5	11.0	16.5	---	---	---
15	14.5	5.0	8.5	17.0	8.5	12.0	22.0	11.0	16.5	---	---	---
16	14.0	6.0	9.0	12.5	7.0	9.5	19.5	11.0	15.0	---	---	---
17	16.5	4.5	9.0	14.5	6.0	9.5	14.5	8.0	11.0	---	---	---
18	17.0	5.0	9.5	12.0	6.0	9.0	17.5	3.5	7.5	---	---	---
19	15.0	6.5	9.5	13.5	7.5	10.0	15.0	1.5	7.5	---	---	---
20	14.0	6.0	9.0	11.0	6.5	8.5	---	---	---	---	---	---
21	14.0	5.0	9.5	15.0	7.0	10.0	---	---	---	---	---	---
22	13.0	5.0	8.0	20.0	6.0	12.0	---	---	---	26.5	17.5	22.0
23	12.0	5.0	8.0	20.5	7.0	12.5	---	---	---	24.0	15.0	20.0
24	14.0	4.0	8.5	22.5	7.0	13.5	---	---	---	28.5	14.5	20.5
25	17.0	6.5	11.0	22.5	8.5	14.5	---	---	---	29.0	14.5	20.5
26	14.5	6.0	9.5	20.5	9.0	13.5	---	---	---	31.5	16.0	22.0
27	17.0	5.0	10.0	15.5	9.0	11.5	---	---	---	29.0	16.0	21.0
28	17.5	6.0	10.5	10.0	8.0	9.0	---	---	---	28.0	13.5	19.5
29	---	---	---	11.0	7.5	9.0	---	---	---	29.5	13.0	20.0
30	---	---	---	12.0	10.0	10.5	---	---	---	27.0	15.5	20.5
31	---	---	---	14.0	10.0	11.5	---	---	---	26.0	15.5	20.5
MONTH	18.5	1.5	9.0	22.5	3.5	11.5	---	---	---	---	---	---

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	26.5	14.5	20.0	29.0	15.5	21.0	32.5	20.0	25.5	27.0	25.0	26.0
2	27.0	14.5	20.0	28.0	14.5	20.0	30.5	21.0	25.5	27.5	25.0	26.0
3	26.5	17.0	21.0	29.5	13.5	20.0	30.0	21.0	25.0	27.5	24.5	26.0
4	27.5	16.0	21.5	31.0	14.0	21.0	31.5	21.0	25.5	27.5	25.0	26.0
5	29.5	16.5	22.5	30.5	15.0	21.0	33.0	21.5	26.0	27.0	24.5	26.0
6	30.5	17.0	22.5	31.0	14.0	21.5	33.0	23.5	27.5	27.5	25.0	26.5
7	30.5	15.5	21.5	31.5	14.5	21.5	32.5	23.0	27.0	26.5	25.0	26.0
8	29.0	13.5	20.0	31.0	16.0	22.0	32.0	22.5	26.5	27.5	26.0	26.5
9	28.5	12.5	20.0	33.5	15.5	22.5	30.0	22.5	26.0	27.5	26.0	26.5
10	29.0	13.0	20.5	31.5	16.0	22.0	32.5	22.0	26.5	28.0	26.0	27.0
11	32.5	14.0	22.0	32.0	17.0	22.5	27.5	23.0	25.0	28.5	26.0	27.0
12	33.5	15.5	23.5	33.0	16.0	23.5	29.5	22.5	25.0	28.5	25.5	27.0
13	31.5	17.0	23.0	34.0	17.0	24.0	32.5	21.0	25.5	27.5	25.5	26.5
14	30.0	17.0	22.0	34.0	18.5	25.0	33.0	20.0	25.0	27.5	25.5	26.5
15	29.5	13.5	20.5	33.5	17.5	24.0	31.5	19.5	25.0	26.5	25.0	26.0
16	29.0	14.5	20.5	33.0	17.0	24.0	30.0	20.5	24.5	26.5	25.0	25.5
17	26.0	14.0	18.5	34.5	18.5	25.5	32.5	21.0	25.5	26.0	25.0	25.5
18	26.5	12.5	18.5	34.5	19.0	25.5	33.0	21.5	25.5	27.0	24.5	26.0
19	30.5	12.5	20.5	33.0	20.5	25.0	33.0	21.0	25.5	27.0	25.0	26.0
20	29.5	14.0	21.0	28.5	20.5	23.5	32.0	21.0	25.0	26.5	24.5	25.5
21	31.0	14.0	21.5	33.5	19.0	24.5	32.0	20.5	25.5	27.0	24.0	25.5
22	30.5	14.0	21.5	32.0	18.0	23.5	32.5	20.5	25.5	26.5	25.0	25.5
23	32.0	16.0	23.0	34.0	18.5	25.0	29.0	22.0	25.0	27.5	24.0	25.5
24	33.0	16.0	23.0	34.5	18.5	25.5	30.0	23.0	26.5	29.0	23.0	25.5
25	31.5	15.5	23.0	32.5	20.0	24.5	29.0	23.5	26.0	29.5	24.0	26.5
26	32.5	16.0	23.0	31.0	19.5	24.0	28.5	24.5	26.5	26.0	22.5	25.0
27	34.0	16.0	26.5	32.5	16.5	23.5	27.5	24.5	26.0	33.5	24.5	27.0
28	34.0	15.5	23.0	32.0	17.0	23.5	27.5	26.0	26.5	29.5	25.0	26.5
29	33.0	16.0	23.0	34.0	18.0	24.5	27.5	25.0	26.0	32.5	25.0	27.5
30	31.5	17.0	22.0	35.0	17.5	25.0	27.5	25.0	26.0	31.5	24.5	27.5
31	---	---	---	33.5	20.0	26.5	27.5	25.0	26.5	---	---	---
MONTH	34.0	12.5	21.5	35.0	13.5	23.5	33.0	19.5	26.0	33.5	22.5	26.0
YEAR	35.0	1.0	16.0									

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
19...	1130	35	16.5	12	71
NOV					
16...	1345	36	14.5	19	38
DEC					
28...	1515	36	12.5	36	22
JAN					
23...	1420	41	15.5	22	54
FEB					
27...	1400	193	16.0	127	10
MAR					
29...	1240	2450	9.5	545	28
APR					
18...	0920	341	11.0	227	12
MAY					
22...	1740	--	--	6	60
JUN					
27...	0930	--	--	38	53
JUL					
25...	1155	--	--	56	32
AUG					
23...	1100	26	28.0	7	50
SEP					
27...	1400	24	27.0	5	69

10262000 MOJAVE RIVER NEAR HODGE, CA

LOCATION.--Lat 34°50'09", long 117°11'27", in SW¼SE¼SE¼ sec.28, T.9 N., R.3 W., San Bernardino County, Hydrologic Unit 18090208, at county bridge 1.5 mi (2.4 km) north of Hodge, 10.9 mi (17.5 km) southwest of Barstow, and 44.5 mi (71.6 km) downstream from Silverwood Lake.

DRAINAGE AREA.--1,091 mi² (2,826 km²).

PERIOD OF RECORD.--October 1930 to September 1932, October 1970 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 2,260 ft (689 m), from topographic map. Prior to Oct. 1, 1970, at different datum.

REMARKS.--Records poor. Regulation by Lake Arrowhead, capacity, 48,000 acre-ft (59.2 hm³) used principally for recreation, Silverwood Lake, capacity, 78,000 acre-ft (96.2 hm³) used for the storage and distribution of imported water and recreation, and Mojave Forks Reservoir, capacity, 89,700 acre-ft (111 hm³), with ungated opening, capacity, 23,500 ft³/s (666 m³/s). Diversion and pumping for irrigation of about 12,000 acres (48.6 km²) above station.

AVERAGE DISCHARGE.--11 years, (water years 1931-32, 1971-79), 30.93 ft³/s (0.876 m³/s), 22,410 acre-ft/yr (27.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,700 ft³/s (360 m³/s) Feb. 10, 1978, gage height, 8.80 ft (2.682 m), no flow all or most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,400 ft³/s (39.6 m³/s) Mar. 28; no flow for most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	76	680	15				
2					0	58	640	11				
3					0	57	620	9.0				
4					0	57	350	6.6				
5					0	57	340	5.0				
6					0	56	320	3.9				
7					0	56	305	3.0				
8					0	145	260	2.3				
9					0	175	220	1.6				
10					0	221	185	1.0				
11					0	222	150	0				
12					0	209	150	0				
13					0	211	160	0				
14					0	220	210	0				
15					0	212	280	0				
16					0	215	270	0				
17					0	200	270	0				
18					0	175	270	0				
19					0	152	265	0				
20					136	138	260	0				
21					147	120	210	0				
22					253	107	160	0				
23					346	94	125	0				
24					273	82	96	0				
25					191	76	72	0				
26					122	80	55	0				
27					44	200	43	0				
28					98	1400	32	0				
29					---	800	25	0				
30					---	760	19	0				
31		---			---	720	---	0	---			---
TOTAL	0	0	0	0	1610	7351	7042	58.4	0	0	0	0
MEAN	0	0	0	0	57.5	237	235	1.88	0	0	0	0
MAX	0	0	0	0	346	1400	680	15	0	0	0	0
MIN	0	0	0	0	0	56	19	0	0	0	0	0
AC-FT	0	0	0	0	3190	14580	13970	116	0	0	0	0

CAL YR 1978 TOTAL 74348.04 MEAN 204 MAX 7600 MIN 0 AC-FT 147500
WTR YR 1979 TOTAL 16061.40 MEAN 44.0 MAX 1400 MIN 0 AC-FT 31860

10262500 MOJAVE RIVER AT BARSTOW, CA

LOCATION.--Lat 34°54'25", long 117°01'19", in SE¼SW¼SW¼ sec.31, T.10 N., R.1 W., San Bernardino County, Hydrologic Unit 18090208, on left bank 75 ft (23 m) upstream from bridge on U.S. Highway 91 at Barstow.

DRAINAGE AREA.--1,291 mi² (3,344 km²).

PERIOD OF RECORD.--October 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,089.34 ft (636.831 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Regulation by Lake Arrowhead, capacity, 48,000 acre-ft (59.2 hm³) used principally for recreation, Silverwood Lake, capacity, 78,000 acre-ft (96.2 hm³) used for the storage and distribution of imported water and recreation, and Mojave Forks Reservoir, capacity, 89,700 acre-ft (111 hm³) with ungated opening, capacity, 23,500 ft³/s (666 m³/s). Diversions and pumping for irrigation of about 15,000 acres (60.7 km²) above station.

AVERAGE DISCHARGE.--48 years, 22.6 ft³/s (0.640 m³/s), 16,370 acre-ft/yr (20.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 64,300 ft³/s (1,820 m³/s) Mar. 3, 1938, gage height, 8.60 ft (2.621 m), on basis of slope-area measurement of maximum flow; no flow for most months each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,820 ft³/s (51.5 m³/s) Mar. 28, gage height, 1.91 ft (0.582 m); no flow many months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						0	88				0	
2						0	32				0	
3						0	55				0	
4						0	107				0	
5						0	63				0	
6						0	28				0	
7						0	51				0	
8						0	45				0	
9						0	32				0	
10						0	26				0	
11						0	.80				0	
12						0	0				0	
13						0	0				0	
14						0	0				0	
15						0	0				0	
16						0	15				40	
17						0	33				.67	
18						0	25				0	
19						0	7.6				0	
20						0	2.9				0	
21						0	2.1				0	
22						0	.04				0	
23						0	0				0	
24						0	0				0	
25						0	0				0	
26						0	0				0	
27						0	0				0	
28						100	0				0	
29					---	914	0				0	
30					---	730	0				0	
31		---			---	405	---		---		0	---
TOTAL	0	0	0	0	0	2149	613.44	0	0	0	40.67	0
MEAN	0	0	0	0	0	69.3	20.4	0	0	0	1.31	0
MAX	0	0	0	0	0	914	107	0	0	0	40	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	4260	1220	0	0	0	81	0

CAL YR 1978 TOTAL 25439.10 MEAN 69.7 MAX 4900 MIN 0 AC-FT 50460
WTR YR 1979 TOTAL 2803.11 MEAN 7.68 MAX 914 MIN 0 AC-FT 5560

10263000 MOJAVE RIVER AT AFTON, CA

LOCATION.--Lat 35°02'14", long 116°23'00", in SW¼NW¼SE¼ sec.18, T.11 N., R.6 E., San Bernardino County, Hydrologic Unit 18090208, on downstream end of right pier of Union Pacific Railroad bridge, 0.3 mi (0.5 km) west of Afton.

DRAINAGE AREA.--2,121 mi^2 (5,493 km^2).

PERIOD OF RECORD.--October 1929 to September 1932, October 1952 to current year. Records for the water year 1930 incomplete, yearly estimate published in WSP 1314.

GAGE.--Water-stage recorder. Datum of gage is 1,390.15 ft (423.718 m) National Geodetic Vertical Datum of 1929. Dec. 21, 1929, to Sept. 30, 1932, at site 1.7 mi (2.7 km) downstream at different datum; Oct. 1952 to May 1978 at datum 10 ft (3.0 m) higher.

REMARKS.--Records poor. No gage-height record all year due to extreme scour condition caused by 1978 water year floods, making this site unsuitable for gage reinstallation this year. Natural flow affected by ground-water withdrawals, diversions, municipal use, and storage in upstream reservoirs 100 mi (160 km) upstream (station 10261500). Results of discharge measurements made during year given in table below.

AVERAGE DISCHARGE.--29 years (water years 1930-32, 1953-78), 7.19 ft^3/s (0.204 m^3/s), 5,210 acre-ft/yr (6.42 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,000 ft^3/s (510 m^3/s) Jan. 26, 1969, gage height, 10.40 ft (3.170 m), from rating curve extended above 3,200 ft^3/s (90.6 m^3/s) on basis of slope-area measurement of maximum flow; no flow at times many years.

EXTREMES FOR CURRENT YEAR.--Not determined this year.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

		Discharge				Discharge	
Date	Time	(ft^3/s)	(m^3/s)	Date	Time	(ft^3/s)	(m^3/s)
Nov. 7	1050	0.73	0.021	Apr. 6	1220	1.29	0.037
Dec. 19	1010	0.85	0.024	Apr. 18	1645	1.02	0.029
Jan. 16	0940	1.18	0.033	June 14	0810	0.84	0.024
Mar. 15	1525	1.04	0.029	July 25	1410	0.59	0.017
Mar. 30	0720	34	0.963	Aug. 29	1155	0.62	0.018
Apr. 2	1615	1.19	0.034	Oct. 3	1620	0.62	0.018

10263500 BIG ROCK CREEK NEAR VALYERMO, CA

LOCATION.--Lat 34°25'15", long 117°50'19", in NW¼SE¼NE¼ sec.20, T.4 N., R.9 W., Los Angeles County, Hydrologic Unit 18090206, on left bank 0.1 mi (0.2 km) upstream from Punchbowl Canyon, and 1.9 mi (3.1 km) southeast of Valyermo.

DRAINAGE AREA.--22.9 mi² (59.3 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1923 to current year. Monthly discharge only for October 1937 to January 1939, published in WSP 1314. Prior to October 1954, published as Rock Creek near Valyermo.

GAGE.--Water-stage recorder. Altitude of gage is 4,050 ft (1,234 m), from topographic map. Prior to May 4, 1938, at same site at different datums. May 4, 1938, to Jan. 26, 1939, at site 0.2 mi (0.3 km) downstream (below Punchbowl Canyon) at different datum.

REMARKS.--Records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--56 years (water years 1924-79), 17.0 ft³/s (0.481 m³/s), 12,320 acre-ft/yr (15.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,300 ft³/s (235 m³/s) Mar. 2, 1938, on basis of slope-area measurement of maximum flow; minimum daily, 0.70 ft³/s (0.020 m³/s) Nov. 5, 1951.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.42 m³/s) and maximum (*), from rating curves extended above 80 ft³/s (2.27 m³/s) on basis of slope-area measurements of January and February peak flows and extended above 300 ft³/s (8.50 m³/s) on basis of slope-area measurements at gage heights 4.48 ft (1.366 m) and 8.14 ft (2.481 m), respectively:

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 17	2200	77	2.18	2.21	0.674	Mar. 27	0900	*118	3.34	2.40	0.732
Feb. 14	0400	91	2.58	2.29	0.698	Apr. 9	1815	87	2.46	2.14	0.652
Feb. 21	0300	61	1.73	2.13	0.649	May 20	2045	68	1.93	2.05	0.625
Mar. 13	0730	55	1.56	2.08	0.634						

Minimum daily discharge, 8.6 ft³/s (0.244 m³/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	11	15	12	13	29	68	50	54	28	14	13
2	13	11	16	12	14	27	65	51	52	27	14	13
3	13	11	16	12	15	25	63	51	51	24	14	13
4	13	10	16	12	14	25	63	55	50	26	14	12
5	12	10	16	14	14	26	67	57	48	29	14	12
6	12	11	17	13	15	29	72	54	47	29	14	12
7	11	10	17	13	15	35	73	53	47	28	14	12
8	12	10	17	13	15	42	72	51	45	29	15	11
9	12	10	16	13	17	45	78	52	43	28	15	11
10	11	12	16	13	18	46	67	54	39	28	14	11
11	11	13	16	14	19	49	37	53	35	27	14	11
12	11	14	16	20	22	51	41	54	35	28	15	11
13	11	14	16	19	26	53	59	54	35	27	15	11
14	11	14	16	19	67	50	60	49	34	23	15	11
15	11	14	16	24	55	48	61	52	34	20	15	10
16	11	14	16	24	44	44	60	53	32	18	15	10
17	11	14	24	25	38	41	58	54	32	16	15	9.8
18	11	14	35	22	35	36	53	55	32	15	15	9.7
19	11	14	19	20	33	34	50	58	32	14	15	9.6
20	11	14	15	18	31	34	48	60	32	15	15	9.6
21	10	15	14	17	42	31	48	64	31	15	15	9.5
22	10	15	13	16	34	30	46	63	31	14	15	9.0
23	11	15	12	16	31	29	47	63	31	14	15	9.0
24	11	15	12	15	29	29	47	62	29	14	14	9.2
25	11	15	12	15	28	30	49	61	28	14	14	9.0
26	11	15	12	14	27	33	53	62	28	14	14	8.9
27	10	15	12	14	26	87	55	65	28	14	14	8.9
28	9.9	15	12	14	27	95	51	63	27	14	14	8.9
29	10	15	12	14	---	78	49	60	27	14	13	8.6
30	11	15	12	14	---	73	50	58	27	14	13	8.6
31	11	---	12	13	---	70	---	56	---	14	14	---
TOTAL	348.9	395	486	494	764	1354	1710	1747	1096	636	446	312.3
MEAN	11.3	13.2	15.7	15.9	27.3	43.7	57.0	56.4	36.5	20.5	14.4	10.4
MAX	14	15	35	25	67	95	78	65	54	29	15	13
MIN	9.9	10	12	12	13	25	37	49	27	14	13	8.6
AC-FT	692	783	964	980	1520	2690	3390	3470	2170	1260	885	619

CAL YR 1978 TOTAL 33692.7 MEAN 92.3 MAX 2050 MIN 4.7 AC-FT 66830
WTR YR 1979 TOTAL 9787.2 MEAN 26.8 MAX 95 MIN 8.6 AC-FT 19410

10263500 BIG ROCK CREEK NEAR VALYERMO, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: January 1962 to March 1979 (discontinued).

INSTRUMENTATION.--Temperature recorder since January 1962.

REMARKS.--Records good. Periods of missing temperature record were due to recorder malfunction.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURES: Maximum recorded, 24.0°C Aug. 19, 26, 1970, July 15, 31, 1972; minimum recorded, 0.5°C Jan. 4, 1974.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded during period October 1978 to March 1979, 15.0°C Nov. 30, minimum recorded, 4.5°C several days during year.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---			---	---	---	12.0	9.5	10.5	9.0	6.5	7.5
2	---			---	---	---	11.5	8.5	9.5	9.0	6.5	7.5
3	---			---	---	---	11.0	8.0	9.0	10.0	7.0	8.0
4	---			---	---	---	12.0	8.5	10.0	10.5	8.0	8.5
5	---			---	---	---	11.5	8.0	9.5	8.0	5.5	6.5
6	---			15.0	11.0	13.0	9.5	7.0	8.0	10.0	7.5	8.5
7	---			14.5	11.0	12.5	9.0	6.5	7.5	10.5	8.0	8.5
8	---			14.5	10.5	12.0	9.0	6.5	7.5	10.5	7.5	8.5
9	---			14.5	11.0	12.0	9.5	7.0	8.0	10.0	7.5	9.0
10	---			13.0	10.0	11.5	10.5	7.5	9.0	11.0	7.5	8.5
11	17.5			10.0	8.0	9.0	11.0	8.0	9.0	11.0	8.5	9.5
12	---			12.5	8.5	10.0	11.0	8.0	9.0	10.0	7.0	8.5
13	---			12.5	9.0	10.5	11.0	8.0	9.0	9.5	6.5	7.5
14	---			11.5	9.0	10.5	11.5	8.0	9.0	8.0	7.0	7.5
15	---			12.0	8.5	10.0	11.0	8.0	9.0	8.0	5.5	6.5
16	---			12.5	8.5	10.0	10.5	8.0	9.0	8.5	6.0	7.0
17	---			12.0	9.0	10.0	10.5	7.0	9.5	10.0	6.0	7.5
18	---			13.0	9.0	10.5	7.0	4.5	5.5	8.5	6.5	7.5
19	---			13.0	9.0	10.5	8.5	4.5	6.0	10.0	6.5	7.5
20	---			12.5	9.0	10.5	9.0	5.5	6.5	10.0	6.5	8.0
21	---			12.0	9.0	9.5	9.5	6.0	7.5	9.5	7.5	8.0
22	---			11.5	8.5	10.0	10.5	7.5	8.0	10.5	7.0	8.0
23	---			11.0	9.5	10.5	10.5	7.0	8.0	10.5	7.0	8.0
24	---			11.0	9.0	10.0	10.5	7.0	8.5	10.0	7.5	8.5
25	---			12.0	9.0	10.0	11.0	7.5	8.5	8.0	6.5	7.0
26	---			11.5	8.5	9.5	10.5	7.5	8.5	9.5	6.0	7.0
27	---			11.0	8.5	9.5	11.0	7.5	8.5	9.5	6.0	7.0
28	---			11.5	8.0	9.5	11.0	8.0	9.0	8.0	5.5	7.0
29	---			12.5	9.0	10.5	11.0	8.0	9.0	9.0	5.5	6.5
30	---			13.0	9.5	10.5	10.0	7.0	8.0	8.5	---	---
31	---			---	---	---	10.0	6.5	7.5	8.0	---	---
MONTH	---			15.0	8.0	10.5	12.0	4.5	8.5	11.0	5.5	8.0

10263500 BIG ROCK CREEK NEAR VALYERMO, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.0	6.0	7.0	7.0	5.0	6.5						
2	9.5	4.5	7.0	10.5	4.5	7.0						
3	9.5	5.0	6.5	11.5	5.5	8.0						
4	10.0	5.0	7.0	12.0	6.5	8.5						
5	10.0	6.0	7.5	12.0	6.5	8.5						
6	10.5	6.5	8.0	12.5	7.0	9.0						
7	10.5	6.5	8.0	12.5	6.5	9.0						
8	11.0	6.5	8.0	12.5	6.5	9.0						
9	11.0	6.0	8.0	8.5	7.0	7.5						
10	11.0	6.0	8.0	---	---	---						
11	11.0	6.5	8.0	---	---	---						
12	10.5	6.5	8.0	---	---	---						
13	10.5	6.5	8.0	---	---	---						
14	7.5	5.0	6.5	---	---	---						
15	9.0	4.5	6.0	---	---	---						
16	9.0	5.0	6.5	---	---	---						
17	9.5	5.0	6.5	---	---	---						
18	10.0	5.5	7.0	---	---	---						
19	10.0	6.0	7.5	---	---	---						
20	8.0	5.5	7.0	---	---	---						
21	9.0	5.5	6.5	---	---	---						
22	9.5	5.0	6.5	---	---	---						
23	10.0	5.5	7.0	---	---	---						
24	9.5	5.5	7.0	---	---	---						
25	11.0	6.0	8.0	---	---	---						
26	11.0	6.0	7.5	---	---	---						
27	10.5	5.5	7.5	---	---	---						
28	11.5	6.0	8.0	---	---	---						
29	---	---	---	---	---	---						
30	---	---	---	---	---	---						
31	---	---	---	---	---	---						
MONTH	11.5	4.5	7.5	---	---	---						
YEAR	17.5	4.5	8.5									

10264000 LITTLE ROCK CREEK NEAR LITTLE ROCK, CA

LOCATION.--Lat 34°27'47", long 118°01'04", in SW¼SW¼NE¼ sec.3, T.4 N., R.11 W., Los Angeles County, Hydrologic Unit 18090206, on right bank 0.3 mi (0.5 km) upstream from Santiago Creek, 1.6 mi (2.6 km) upstream from Little Rock Palmdale Irrigation District's dam, and 5 mi (8 km) south of Little Rock.

DRAINAGE AREA.--49.0 mi^3 (126.9 km^2).

PERIOD OF RECORD.--October 1930 to February 1938, May to September 1938, April 1939 to September 1977, October 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,290 ft (1,003 m), from topographic map. Prior to May 1943, at site 500 ft (150 m) downstream at different datums.

REMARKS.--Records poor. No regulation or diversion above station.

COOPERATION.--Records were furnished by Los Angeles County Flood Control District.

AVERAGE DISCHARGE.--46 years (1930-37, 1939-77, 1978-79), 16.1 ft^3/s (0.456 m^3/s), 11,660 acre-ft/yr (14.4 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,000 ft^3/s (481 m^3/s), estimated, Mar. 2, 1938; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 367 ft^3/s (10.4 m^3/s) Mar. 27, gage height, 6.17 ft (1.881 m); minimum daily, 0.50 ft^3/s (0.014 m^3/s) Sept. 14-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	2.9	2.9	4.9	22	43	119	66	25	5.2	.70	.70
2	1.2	2.9	6.0	6.1	21	40	111	64	24	4.9	.60	.70
3	.90	2.9	5.9	6.4	21	39	106	62	23	4.7	.60	.70
4	1.0	2.7	5.8	4.6	20	40	104	60	22	4.5	.60	.70
5	1.2	2.7	5.7	13	20	43	116	59	22	4.3	.60	.70
6	1.2	2.6	5.6	19	21	55	124	57	21	4.0	.60	.60
7	1.2	2.5	5.5	17	22	79	119	55	20	3.8	.60	.60
8	1.0	2.4	5.4	17	22	85	109	54	19	3.6	.60	.60
9	1.0	2.3	5.3	18	25	92	114	52	18	3.4	.60	.60
10	1.0	2.2	5.2	19	28	83	101	50	17	3.1	.70	.60
11	1.0	2.2	5.1	19	30	83	92	49	16	2.9	.70	.60
12	1.0	5.0	4.9	33	32	78	92	48	15	2.7	.70	.60
13	1.0	4.0	4.9	28	35	83	106	46	14	2.6	.70	.60
14	1.2	4.0	4.9	24	139	76	114	45	13	2.5	.70	.50
15	1.4	3.8	4.9	27	89	70	121	44	12	2.4	.70	.50
16	1.6	3.5	4.6	31	67	62	121	42	11	2.3	.80	.50
17	1.8	3.0	5.2	34	56	59	109	41	10	2.2	.80	.50
18	2.0	3.0	53	28	51	52	87	40	9.4	2.1	.80	.50
19	2.0	3.0	21	25	48	51	81	38	8.5	2.0	.80	.50
20	2.1	2.9	15	22	46	49	79	37	7.6	1.9	.80	.50
21	2.7	2.9	6.7	22	64	46	79	36	7.4	1.8	.80	.50
22	2.7	5.0	6.1	22	51	46	79	34	7.2	1.7	.80	.50
23	2.3	4.5	7.0	21	47	47	79	34	6.9	1.6	.80	.50
24	2.1	4.0	8.7	21	43	49	78	33	6.7	1.5	.80	.50
25	2.1	3.5	11	21	41	52	76	32	6.5	1.4	.80	.50
26	2.3	3.0	10	20	41	56	74	31	6.3	1.3	.80	.50
27	2.3	2.9	9.8	19	41	196	72	30	6.0	1.2	.80	.50
28	2.1	2.9	9.1	20	41	249	71	29	5.8	1.1	.80	.50
29	2.1	2.9	8.0	19	---	159	69	28	5.6	1.0	.70	.50
30	2.1	2.9	6.7	19	---	134	67	27	5.4	.90	.70	.50
31	2.5	---	5.4	19	---	127	---	26	---	.80	.70	---
TOTAL	51.30	95.0	265.3	619.0	1184	2423	2869	1349	391.3	79.40	22.20	16.80
MEAN	1.65	3.17	8.56	20.0	42.3	78.2	95.6	43.5	13.0	2.56	.72	.56
MAX	2.7	5.0	53	34	139	249	124	66	25	5.2	.80	.70
MIN	.90	2.2	2.9	4.6	20	39	67	26	5.4	.80	.60	.50
AC-FT	102	188	526	1230	2350	4810	5690	2680	776	157	44	33

WTR YR 1979 TOTAL 9365.30 MEAN 25.7 MAX 249 MIN .50 AC-FT 18580

10264600 OAK CREEK NEAR MOJAVE, CA

LOCATION.--Lat 35°03'00", long 118°21'25", in NW¼ sec.15, T.11 N., R.14 W., Kern County, Hydrologic Unit 18090206, on upstream right wingwall of culvert, 100 ft (30 m) downstream from unnamed tributary, 0.1 mi (0.2 km) west of junction of Oak Creek and Willow Springs Roads, and 10.5 mi (16.9 km) west of Mojave.

DRAINAGE AREA.--15.8 mi^2 (40.9 km^2).

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,100 ft (1,250 m), from topographic map.

REMARKS.--Records fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--22 years, 0.99 ft^3/s (0.028 m^3/s), 717 acre-ft/yr (884,000 m^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,740 ft^3/s (49.3 m^3/s) May 14, 1973, by slope-area measurement, caused by failure of small earthen dam 4 mi (6 km) upstream during intense local thunderstorm; maximum gage height, 10.53 ft (3.210 m) May 14, 1973, ponding at culvert 0.1 mi (0.2 km) downstream; no flow for some months in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12 ft^3/s (0.34 m^3/s) Mar. 27, gage height, 1.80 ft (0.549 m); minimum daily, 0.50 ft^3/s (0.014 m^3/s) Sept. 17-19, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.6	1.8	1.3	3.2	4.2	4.0	6.5	3.1	1.6	1.0	.68
2	1.2	1.6	1.7	1.3	3.2	3.8	4.1	6.7	2.9	1.6	1.0	.68
3	1.2	1.4	1.6	1.4	3.0	3.7	4.2	6.3	2.8	1.6	1.0	.68
4	1.2	1.4	1.6	1.4	3.0	3.6	4.4	6.1	2.8	1.6	1.0	.68
5	1.2	1.4	1.7	1.5	3.2	3.5	4.5	6.1	2.7	1.6	1.0	.68
6	1.1	1.4	1.8	1.6	3.4	3.5	4.5	6.3	2.6	1.6	1.0	.68
7	1.1	1.4	1.5	1.7	3.6	3.5	4.4	6.4	2.6	1.5	1.0	.62
8	1.1	1.2	1.2	1.8	3.6	3.5	4.3	7.2	2.6	1.4	1.0	.62
9	1.1	1.3	1.2	2.3	3.6	3.6	4.3	6.7	2.2	1.3	1.0	.62
10	1.1	1.4	1.2	2.2	3.6	3.5	4.3	6.4	2.0	1.3	1.0	.62
11	1.2	1.7	1.3	3.8	3.5	3.4	4.4	6.2	2.3	1.3	.99	.62
12	1.1	1.6	1.3	3.8	3.7	3.7	4.5	5.8	2.4	1.2	.99	.62
13	1.1	1.8	1.4	2.6	4.5	3.8	4.7	5.5	2.3	1.2	.98	.62
14	1.0	1.6	1.5	2.5	5.7	4.1	4.7	6.1	2.4	1.3	.98	.56
15	1.1	1.5	1.6	3.3	4.2	4.4	4.8	6.3	2.4	1.2	.97	.56
16	1.1	1.5	1.6	3.6	3.9	4.6	4.8	6.1	2.4	1.2	.97	.62
17	1.1	1.5	3.2	4.3	3.7	5.1	4.8	6.1	2.5	1.2	.97	.50
18	1.1	1.5	2.9	3.3	3.9	4.9	4.9	5.9	2.6	1.1	1.1	.50
19	1.2	1.5	2.1	2.9	3.9	6.2	5.1	5.5	2.5	1.1	1.0	.50
20	1.2	1.6	1.8	2.7	3.9	5.5	5.5	5.2	2.4	1.1	.96	.56
21	1.2	1.8	1.7	2.7	4.7	5.1	5.8	4.9	2.4	1.0	.92	.50
22	1.2	1.8	1.8	2.7	3.9	4.9	5.8	4.8	2.3	1.0	.86	.56
23	1.2	1.7	1.9	2.6	4.0	4.8	5.8	4.6	2.3	.98	.84	.56
24	1.2	1.7	1.8	2.6	3.9	4.8	5.8	4.5	2.2	1.1	.86	.62
25	1.2	1.6	1.8	2.7	3.8	4.8	5.6	4.4	2.0	1.1	.82	.56
26	1.2	1.6	1.7	2.7	3.7	4.8	5.9	4.3	1.8	1.1	.77	.59
27	1.2	1.6	1.6	2.9	3.8	6.4	6.0	4.2	1.7	1.0	.75	.62
28	1.2	1.7	1.5	3.0	3.7	6.7	6.0	4.5	1.7	1.0	.75	.62
29	1.2	1.6	1.5	2.9	---	4.6	6.3	4.5	1.6	1.0	.76	.69
30	2.1	1.6	1.5	2.7	---	3.9	6.3	3.8	1.6	1.0	.77	.68
31	1.9	---	1.4	2.6	---	4.0	---	3.3	---	1.0	.71	---
TOTAL	37.5	46.6	52.2	79.4	105.8	136.9	150.5	171.2	70.1	38.28	28.72	18.22
MEAN	1.21	1.55	1.68	2.56	3.78	4.42	5.02	5.52	2.34	1.23	.93	.61
MAX	2.1	1.8	3.2	4.3	5.7	6.7	6.3	7.2	3.1	1.6	1.1	.69
MIN	1.0	1.2	1.2	1.3	3.0	3.4	4.0	3.3	1.6	.98	.71	.50
AC-FT	74	92	104	157	210	272	299	340	139	76	57	36

CAL YR 1978 TOTAL 2479.98 MEAN 6.79 MAX 413 MIN .01 AC-FT 4920
WTR YR 1979 TOTAL 935.42 MEAN 2.56 MAX 7.2 MIN .50 AC-FT 1860

10264750 PINE TREE CREEK NEAR MOJAVE, CA

LOCATION.--Lat 35°13'50", long 118°05'07", in SW¼NW¼SE¼ sec.14, T.31 S., R.36 E., Kern County, Hydrologic Unit 18090206, on downstream side of city of Los Angeles aqueduct-siphon pier near right bank, 0.5 mi (0.8 km) downstream from unnamed tributary, and 13 mi (21 km) northeast of Mojave.

DRAINAGE AREA.--33.5 mi^2 (86.8 km^2).

PERIOD OF RECORD.--July 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,700 ft (823 m), from topographic map. Prior to Oct. 1, 1961, at datum 3.0 ft (0.9 m) higher.

REMARKS.--Records poor. No regulation or diversion above station.

AVERAGE DISCHARGE.--21 years (water years 1959-79), 0.26 ft^3/s (0.007 m^3/s), 188 acre-ft/yr (232,000 m^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft^3/s (850 m^3/s) Aug. 23, 1961, on basis of field estimate of maximum flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11 ft^3/s (0.31 m^3/s) Jan. 16, gage height, unknown, on basis of field estimate of maximum flow; no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	0		0						
2			0	0		0						
3			0	0		0						
4			0	0		0						
5			0	0		0						
6			0	0		0						
7			0	.30		0						
8			0	0		0						
9			0	0		0						
10			0	0		0						
11			0	0		0						
12			0	0		0						
13			0	0		0						
14			0	0		0						
15			0	0		0						
16			0	.59		0						
17			0	0		.20						
18			.30	0		0						
19			.20	0		.25						
20			0	0		0						
21			0	0		0						
22			0	0		0						
23			0	0		0						
24			0	0		0						
25			0	0		0						
26			0	0		0						
27			0	0		.50						
28			0	0		.40						
29			0	0	---	0						
30			0	0	---	0						
31		---	0	0	---	0	---		---			---
TOTAL	0	0	.50	.89	0	1.35	0	0	0	0	0	0
MEAN	0	0	.016	.029	0	.044	0	0	0	0	0	0
MAX	0	0	.30	.59	0	.50	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	1.0	1.8	0	2.7	0	0	0	0	0	0

CAL YR 1978 TOTAL 558.77 MEAN 1.53 MAX 260 MIN 0 AC-FT 1110
WTR YR 1979 TOTAL 2.74 MEAN .008 MAX .59 MIN 0 AC-FT 5

10267000 PINE CREEK AT DIVISION BOX, NEAR BISHOP, CA

LOCATION.--Lat 37°24'59", long 118°37'15", in SE¼NW¼ sec.19, T.6 S., R.31 E., Inyo County, Hydrologic Unit 18090102, on right bank 0.2 mi (0.3 km) upstream from division box (at Rovana), 1.9 mi (3.1 km) west of Round Valley schoolhouse, and 13 mi (21 km) northwest of Bishop.

DRAINAGE AREA.--36.4 mi² (94.3 km²).

PERIOD OF RECORD.--October 1921 to current year. Prior to October 1959 monthly discharge only, published in WSP 1314 and 1734.

GAGE.--Water-stage recorder. Parshall flume since November 1938. Altitude of gage is 5,280 ft (1,609 m), from topographic map.

REMARKS.--Records poor. No regulation or diversion above station.

COOPERATION.--Records were furnished by city of Los Angeles, Department of Water and Power.

AVERAGE DISCHARGE.--58 years, 45.4 ft³/s (1.286 m³/s), 32,890 acre-ft/yr (40.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 509 ft³/s (14.4 m³/s) July 2, 1967, gage height, 6.05 ft (1.844 m); minimum daily, 10 ft³/s (0.28 m³/s) Jan. 8, 1930, Jan. 21, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 232 ft³/s (6.57 m³/s) May 27; minimum daily, 28 ft³/s (0.79 m³/s). Many days in January, February, and March.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	33	33	30	29	28	30	41	138	111	57	36
2	45	34	33	29	29	28	30	44	141	105	54	34
3	44	34	33	29	29	29	30	46	154	102	56	33
4	43	34	32	28	29	28	29	46	171	98	55	36
5	45	35	31	28	28	28	30	46	174	100	54	35
6	45	34	30	28	28	28	30	45	214	98	53	34
7	46	33	30	29	28	28	30	45	203	93	53	34
8	46	33	30	28	28	29	30	45	160	86	54	34
9	45	33	31	28	28	29	30	44	134	82	52	34
10	44	33	32	28	28	29	30	43	144	81	48	35
11	44	33	31	43	28	30	30	43	169	86	50	34
12	43	33	31	33	28	29	30	45	188	91	51	34
13	43	33	30	31	31	29	30	54	222	97	49	33
14	42	32	30	31	32	29	32	68	211	102	45	33
15	42	32	30	31	30	29	33	85	153	103	44	33
16	41	32	30	31	29	29	34	101	131	102	44	33
17	40	32	32	31	29	29	34	112	118	94	47	33
18	40	32	31	31	29	30	33	126	91	89	48	32
19	40	33	30	31	28	30	33	143	77	83	44	32
20	39	32	30	31	29	29	33	156	86	79	42	30
21	39	34	30	31	29	29	33	169	95	82	39	31
22	39	34	30	31	28	28	34	181	112	82	38	31
23	38	34	30	30	28	29	34	175	128	81	36	31
24	37	34	31	30	28	29	34	150	141	77	35	31
25	37	34	30	30	28	29	34	146	147	77	34	33
26	36	34	30	29	28	29	34	189	135	75	34	32
27	36	33	30	29	28	30	34	232	133	71	34	32
28	36	33	30	30	28	30	34	218	129	65	32	31
29	36	33	30	30	---	30	33	199	124	63	35	31
30	36	32	30	29	---	30	30	180	121	61	30	31
31	35	---	30	29	---	30	---	160	---	58	37	---
TOTAL	1267	995	951	937	802	900	963	3377	4344	2674	1392	992
MEAN	40.9	33.2	30.7	30.2	28.6	29.0	32.1	109	145	86.3	44.9	33.1
MAX	46	35	33	43	32	30	30	232	222	111	57	36
MIN	35	32	30	28	28	28	29	41	77	58	32	31
AC-FT	2510	1970	1890	1860	1590	1790	1910	6700	8620	5300	2760	1970

CAL YR 1978 TOTAL 26172 MEAN 71.7 MAX 264 MIN 28 AC-FT 51910
WTR YR 1979 TOTAL 19594 MEAN 53.7 MAX 232 MIN 28 AC-FT 38860

10271210 BISHOP CREEK BELOW POWERPLANT NO. 6, NEAR BISHOP, CA

LOCATION.--Lat 37°20'59", long 118°27'41", in SE¼SE¼ sec.9, T.7 S., R.32 E., Inyo County, Hydrologic Unit 18090102, below powerplant No. 6 tailrace, and 3.6 mi (5.8 km) west of Bishop.

DRAINAGE AREA.--104 mi^2 or 269 km^2 (natural flow).

PERIOD OF RECORD.--October 1936 to current year. Monthly and yearly mean discharges prior to October 1969, published in WSP 2127.

GAGE.--None.

REMARKS.--Flow regulated for power development by South Lake, Lake Sabrina, and Intake No. 2 Reservoir, combined capacity, 20,660 acre-ft (25.5 hm^3) and many powerhouses. Records for "actual flow" include Bishop Creek above powerplant No. 6 tailrace and Bishop Creek powerplant No. 6 conduit. Records for "natural flow" include "actual flow" of Bishop Creek below powerplant No. 6, Abelour ditch near Bishop, minus Birch-McGee diversion to Bishop Creek powerplant near Bishop, and the change in contents and evaporation for South Lake, Lake Sabrina, and Intake No. 2 Reservoir.

COOPERATION.--Records furnished by Southern California Edison Co. and reviewed by the Geological Survey, in connection with a Federal Energy Regulatory Commission Project.

AVERAGE DISCHARGE (Actual flow).--44 years, 98.6 ft^3/s (2.792 m^3/s), 71,440 acre-ft/yr (88.1 hm^3/yr).
(Natural flow).--44 years, 104 ft^3/s (2.945 m^3/s), 75,350 acre-ft/yr (92.9 hm^3/yr).

EXTREMES (ACTUAL FLOW) FOR PERIOD OF RECORD (SINCE 1970).--Maximum daily discharge, 809 ft^3/s (22.9 m^3/s) Sept. 6, 1978; minimum daily, 32 ft^3/s (0.91 m^3/s) Dec. 19, 1977.

EXTREMES (ACTUAL FLOW) FOR CURRENT YEAR.--Maximum daily discharge, 192 ft^3/s (5.44 m^3/s) July 22; minimum daily, 48 ft^3/s (1.36 m^3/s) Apr. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	121	93	72	71	104	71	113	134	131	133	119
2	133	120	77	69	66	101	48	122	127	131	139	111
3	133	118	76	68	74	104	51	119	134	132	136	111
4	134	117	69	67	73	103	56	124	137	130	147	110
5	133	118	63	73	78	103	65	125	134	130	146	114
6	133	118	61	74	66	105	102	118	133	136	156	110
7	133	117	61	71	73	107	103	118	135	140	152	111
8	133	107	64	71	72	103	101	118	134	135	164	110
9	132	104	61	73	74	103	103	109	136	136	158	113
10	134	98	56	74	98	103	100	109	136	135	147	109
11	133	101	59	86	101	103	99	109	145	133	154	114
12	126	104	55	82	102	101	100	112	151	133	163	112
13	138	102	59	69	113	101	104	113	139	135	160	111
14	134	102	61	73	117	101	112	116	136	135	153	111
15	129	104	61	72	105	100	110	123	137	134	146	112
16	128	103	59	70	104	104	110	125	137	133	146	112
17	131	102	62	70	103	101	107	130	125	136	146	112
18	137	99	62	70	104	100	103	130	134	153	147	109
19	129	102	62	71	103	100	104	131	137	162	147	111
20	139	102	59	70	102	101	101	131	136	164	146	105
21	134	102	62	71	104	101	102	130	134	170	130	111
22	133	103	61	71	103	101	103	130	135	192	153	112
23	133	103	68	71	102	102	102	129	137	180	120	110
24	135	99	71	71	104	101	101	132	133	176	137	111
25	133	99	67	71	102	100	98	106	135	166	134	113
26	135	100	67	71	103	101	103	138	135	162	134	108
27	134	109	67	72	105	104	109	134	132	160	137	111
28	134	99	66	71	101	101	108	130	136	156	135	110
29	141	100	68	71	---	96	107	143	136	149	133	108
30	134	102	64	70	---	106	109	135	134	140	135	115
31	127	---	68	65	---	97	---	135	---	142	135	---
TOTAL	4127	3175	2009	2220	2623	3158	2892	3837	4064	4547	4469	3336
MEAN	133	106	64.8	71.6	93.7	102	96.4	124	135	147	144	111
MAX	141	121	93	86	117	107	112	143	151	192	164	119
MIN	126	98	55	65	66	96	48	106	125	130	120	105
AC-FT	8190	6300	3980	4400	5200	6260	5740	7610	8060	9020	8860	6620
(†)	3500	2700	2850	3050	2600	2870	3510	11200	15260	12270	6320	3600

CAL YR 1978 TOTAL 53644 MEAN 147 MAX 809 MIN 33 AC-FT 106400 † 102000
WTR YR 1979 TOTAL 40457 MEAN 111 MAX 192 MIN 48 AC-FT 80250 † 69730

† Computed natural flow, in acre-feet.

10271210 BISHOP CREEK BELOW POWERPLANT NO. 6, NEAR BISHOP, CA

LOCATION.--Lat 37°20'59", long 118°27'41", in SE¼SE¼ sec.9, T.7 S., R.32 E., Inyo County, Hydrologic Unit 18090102, below powerplant No. 6 tailrace, and 3.6 mi (5.8 km) west of Bishop.

DRAINAGE AREA.--104 mi² or 269 km² (natural flow).

PERIOD OF RECORD.--October 1936 to current year. Monthly and yearly mean discharges prior to October 1969, published in WSP 2127.

GAGE.--None.

REMARKS.--Flow regulated for power development by South Lake, Lake Sabrina, and Intake No. 2 Reservoir, combined capacity, 20,660 acre-ft (25.5 hm³) and many powerhouses. Records for "actual flow" include Bishop Creek above powerplant No. 6 tailrace and Bishop Creek powerplant No. 6 conduit. Records for "natural flow" include "actual flow" of Bishop Creek below powerplant No. 6, Abelour ditch near Bishop, minus Birch-McGee diversion to Bishop Creek powerplant near Bishop, and the change in contents and evaporation for South Lake, Lake Sabrina, and Intake No. 2 Reservoir.

COOPERATION.--Records furnished by Southern California Edison Co. and reviewed by the Geological Survey, in connection with a Federal Energy Regulatory Commission Project.

AVERAGE DISCHARGE (Actual flow).--44 years, 98.6 ft³/s (2.792 m³/s), 71,440 acre-ft/yr (88.1 hm³/yr).
(Natural flow).--44 years, 104 ft³/s (2.945 m³/s), 75,350 acre-ft/yr (92.9 hm³/yr).

EXTREMES (ACTUAL FLOW) FOR PERIOD OF RECORD (SINCE 1970).--Maximum daily discharge, 809 ft³/s (22.9 m³/s) Sept. 6, 1978; minimum daily, 32 ft³/s (0.91 m³/s) Dec. 19, 1977.

EXTREMES (ACTUAL FLOW) FOR CURRENT YEAR.--Maximum daily discharge, 192 ft³/s (5.44 m³/s) July 22; minimum daily, 48 ft³/s (1.36 m³/s) Apr. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	121	93	72	71	104	71	113	134	131	133	119
2	133	120	77	69	66	101	48	122	127	131	139	111
3	133	118	76	68	74	104	51	119	134	132	136	111
4	134	117	69	67	73	103	56	124	137	130	147	110
5	133	118	63	73	78	103	65	125	134	130	146	114
6	133	118	61	74	66	105	102	118	133	136	156	110
7	133	117	61	71	73	107	103	118	135	140	152	111
8	133	107	64	71	72	103	101	118	134	135	164	110
9	132	104	61	73	74	103	103	109	136	136	158	113
10	134	98	56	74	98	103	100	109	136	135	147	109
11	133	101	59	86	101	103	99	109	145	133	154	114
12	126	104	55	82	102	101	100	112	151	133	163	112
13	138	102	59	69	113	101	104	113	139	135	160	111
14	134	102	61	73	117	101	112	116	136	135	153	111
15	129	104	61	72	105	100	110	123	137	134	146	112
16	128	103	59	70	104	104	110	125	137	133	146	112
17	131	102	62	70	103	101	107	130	125	136	146	112
18	137	99	62	70	104	100	103	130	134	153	147	109
19	129	102	62	71	103	100	104	131	137	162	147	111
20	139	102	59	70	102	101	101	131	136	164	146	105
21	134	102	62	71	104	101	102	130	134	170	130	111
22	133	103	61	71	103	101	103	130	135	192	153	112
23	133	103	68	71	102	102	102	129	137	180	120	110
24	135	99	71	71	104	101	101	132	133	176	137	111
25	133	99	67	71	102	100	98	106	135	166	134	113
26	135	100	67	71	103	101	103	138	135	162	134	108
27	134	109	67	72	105	104	109	134	132	160	137	111
28	134	99	66	71	101	101	108	130	136	156	135	110
29	141	100	68	71	---	96	107	143	136	149	133	108
30	134	102	64	70	---	106	109	135	134	140	135	115
31	127	---	68	65	---	97	---	135	---	142	135	---
TOTAL	4127	3175	2009	2220	2623	3158	2892	3837	4064	4547	4469	3336
MEAN	133	106	64.8	71.6	93.7	102	96.4	124	135	147	144	111
MAX	141	121	93	86	117	107	112	143	151	192	164	119
MIN	126	98	55	65	66	96	48	106	125	130	120	105
AC-FT	8190	6300	3980	4400	5200	6260	5740	7610	8060	9020	8860	6620
(†)	3500	2700	2850	3050	2600	2870	3510	11200	15260	12270	6320	3600

CAL YR 1978 TOTAL 53644 MEAN 147 MAX 809 MIN 33 AC-FT 106400 † 102000
WTR YR 1979 TOTAL 40457 MEAN 111 MAX 192 MIN 48 AC-FT 80250 † 69730

† Computed natural flow, in acre-feet.

10277400 OWENS RIVER BELOW TINEMAHA RESERVOIR, NEAR BIG PINE, CA
(National stream-quality accounting network station)

LOCATION.--Lat 37°03'15", long 118°13'33", in SW¼NE¼ sec.26, T.10 S., R.34 E., Inyo County, Hydrologic Unit 18090102, about 100 ft (30 m) west of center of dam, and 8.4 mi (13.5 km) southeast of Big Pine.

DRAINAGE AREA.--1,964 mi^2 (5,087 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year. Since November 1951 in files of city of Los Angeles, Department of Water and Power as Owens River at Tinemaha Dam.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 3,860 ft (1,177 m), from topographic map.

REMARKS.--Records poor. Flow regulated since 1941 by Lake Crowley, capacity, 183,500 acre-ft (226 km^3) and several small reservoirs, combined capacity, 41,400 acre-ft (51.0 km^3). Diversions from both main stream and tributaries. Water imported from Mono Basin since 1941 for diversion to Los Angeles Aqueduct which diverts 4 mi (6 km) downstream.

COOPERATION.--Records were furnished by city of Los Angeles, Department of Water and Power.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 801 ft^3/s (22.7 m^3/s) Mar. 16, 1979; minimum daily, 5.0 ft^3/s (0.14 m^3/s) Sept. 15, 16, 25-30, 1976, Mar. 29, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 801 ft^3/s (22.7 m^3/s) Mar. 16; minimum daily, 5.0 ft^3/s (0.14 m^3/s) Mar. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	616	746	676	673	685	673	8.0	589	18	720	659	720
2	698	746	676	670	683	670	8.0	587	183	723	659	718
3	701	743	673	670	683	673	8.0	592	433	723	659	715
4	701	746	673	676	683	673	7.0	589	605	720	656	715
5	701	752	678	545	637	676	7.0	592	627	720	659	715
6	701	752	673	410	678	786	7.0	589	624	720	654	723
7	698	752	676	414	681	749	7.0	592	654	720	645	723
8	695	659	403	412	678	743	7.0	597	676	720	645	718
9	704	583	478	407	676	740	7.0	595	676	720	645	718
10	701	407	478	405	676	758	7.0	595	676	723	692	692
11	701	407	478	571	676	758	7.0	597	676	726	723	673
12	698	403	600	684	676	758	180	600	676	726	723	673
13	698	478	673	678	678	755	640	600	676	726	726	673
14	695	597	670	678	676	755	651	605	676	729	723	673
15	695	600	673	678	673	775	651	608	673	729	720	673
16	695	603	676	676	673	801	656	613	640	729	723	673
17	701	603	673	678	676	801	648	635	627	732	723	673
18	701	603	673	678	673	795	645	651	627	732	723	673
19	701	603	510	678	673	743	561	651	627	732	723	673
20	701	603	595	678	676	543	449	651	627	732	723	673
21	701	603	673	676	673	452	449	648	651	732	723	673
22	701	603	676	676	592	579	449	651	673	729	723	673
23	739	603	673	676	673	648	449	648	670	729	726	673
24	793	605	673	676	673	645	452	621	670	681	729	673
25	793	605	673	676	667	643	452	587	690	659	726	673
26	798	605	676	676	665	684	449	579	726	662	732	673
27	781	632	673	673	670	743	447	579	729	656	729	673
28	755	673	676	673	673	396	449	579	729	659	726	673
29	752	673	678	635	---	5.0	454	579	726	656	720	673
30	749	673	676	597	---	15	510	345	723	659	720	673
31	746	---	673	605	---	15	---	15	---	656	720	---
TOTAL	22206	18581	19717	19198	18476	19370.0	9737.0	17959	18604	21980	21777	20617
MEAN	716	619	636	619	660	625	325	579	620	709	702	687
MAX	798	752	678	684	681	801	656	651	729	732	732	723
MIN	616	403	403	405	592	5.0	7.0	15	18	656	645	673
AC-FT	44050	36860	39110	38080	36650	38420	19310	35620	36900	43600	43190	40890

CAL YR 1978 TOTAL 191316.0 MEAN 524 MAX 798 MIN 99 AC-FT 379500
WTR YR 1979 TOTAL 228222.0 MEAN 625 MAX 801 MIN 5.0 AC-FT 452700

10277400 OWENS RIVER BELOW TINEMAHA RESERVOIR, NEAR BIG PINE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL ANALYSES: Water years 1975 to current year.
BIOLOGICAL DATA: Water years 1975 to current year.
SPECIFIC CONDUCTANCE: Water years 1975 to current year.
WATER TEMPERATURES: Water years 1975 to current year.
SEDIMENT RECORDS: Water years 1975 to current year (partial-record station).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1975 to current year.
WATER TEMPERATURES: February 1975 to current year.

INSTRUMENTATION.--Specific-conductance recorder since May 1975. Temperature recorder since February 1975.

REMARKS.--Records good. Periods of missing temperature and conductivity data due to equipment malfunction.

COOPERATION.--Pesticide samples were collected by U.S. Geological Survey and analyzed by Environmental Protection Agency.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 442 micromhos Feb. 13, 1978; minimum recorded, 143 micromhos July 29, 1978.
WATER TEMPERATURES: Maximum recorded, 26.5°C July 20, 1978; minimum recorded, 0.0°C Dec. 7-8, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 375 micromhos Apr. 17; minimum recorded, 153 micromhos Oct. 18.
WATER TEMPERATURES: Maximum recorded, 25.0°C July 17; minimum recorded, 0.0°C Dec. 7-8.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT												
18...	1600	701	235	7.9	16.0	4.0	8.4	K2	K2	62	0	20
NOV												
16...	0730	683	259	7.4	5.0	1.0	11.6	20	K12	60	0	19
DEC												
28...	0920	673	259	7.3	3.5	5.6	11.3	K1	K10	63	0	20
JAN												
23...	0840	678	280	7.3	4.0	5.0	11.4	K2	20	71	0	22
FEB												
27...	0800	670	286	7.8	6.5	5.9	10.5	54	K3	70	0	22
MAR												
30...	1230	8.3	300	7.7	12.5	9.4	8.8	<1	K9	74	0	23
APR												
17...	0800	648	306	7.9	13.0	3.1	9.0	<1	K2	69	0	21
MAY												
21...	1715	648	248	7.8	21.0	13	7.9	63	--	57	0	19
JUN												
26...	1045	721	227	7.7	21.5	4.2	7.7	K3	K15	6	12	.8
JUL												
24...	1300	654	224	8.4	22.5	6.0	7.7	20	53	56	0	17
AUG												
22...	1145	718	215	8.5	19.0	6.4	7.3	K1	--	62	0	19
SEP												
25...	1300	667	265	7.9	18.0	6.5	--	64	40	62	0	19

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT											
18...	3.0	24	43	1.3	4.5	86	17	10	.6	21	158
NOV											
16...	3.1	25	46	1.4	3.3	87	16	14	.5	21	158
DEC											
28...	3.1	26	46	1.4	3.2	86	19	10	.5	23	163
JAN											
23...	3.8	33	49	1.7	3.6	94	23	13	.5	26	173
FEB											
27...	3.7	32	48	1.7	3.4	89	26	14	.5	24	182
MAR											
30...	3.9	36	50	1.8	4.0	110	19	13	.6	24	182
APR											
17...	4.1	36	51	1.9	4.3	100	23	16	.6	26	193
MAY											
21...	2.2	27	49	1.6	3.7	84	17	11	.5	21	157
JUN											
26...	.9	5.5	57	1.0	2.6	39	10	4.2	.4	18	82
JUL											
24...	3.2	24	47	1.4	3.2	78	19	8.4	.5	21	149
AUG											
22...	3.6	26	46	1.4	3.1	82	20	9.8	.5	24	152
SEP											
25...	3.6	27	53	1.5	3.4	91	19	9.6	.5	25	169

K Results based on colony count outside the acceptable range (non-ideal colony count).

< Actual value is known to be less than the value shown.

10277400 OWENS RIVER BELOW TINEMAHA RESERVOIR, NEAR BIG PINE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT											
18...	152	.33	--	.03	.62	.65	.30	.35	.98	.070	.070
NOV											
16...	154	.02	--	.02	.36	.38	.01	.37	.40	.070	.060
DEC											
20...	157	.07	--	.01	.41	.42	.15	.27	.49	.080	.040
JAN											
23...	182	.09	--	.01	.39	.40	.20	.20	.49	.110	.080
FEB											
27...	179	.05	--	.02	1.7	1.7	1.2	.51	1.8	.090	.130
MAR											
30...	190	.08	--	.06	.36	.42	.08	--	.50	.120	.090
APR											
17...	191	.04	--	.04	.34	.38	.17	.21	.42	.070	.060
MAY											
21...	152	.05	--	.03	.29	.32	.12	.20	.37	.080	.080
JUN											
26...	100	.02	--	.01	--	--	--	.19	--	.060	.060
JUL											
24...	143	.09	--	.03	.38	.41	.20	.21	.50	.120	.100
AUG											
22...	155	.02	--	.04	--	--	--	1.2	--	.130	.130
SEP											
25...	163	.17	.19	.07	.68	.75	.11	.64	.92	.080	.040

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CAUMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
OCT										
18...	1600	26	24	0	0	20	9	2	7	0
JAN										
23...	0840	30	30	0	0	30	7	2	5	0
APR										
17...	0800	32	32	100	80	20	10	0	14	0
JUL										
24...	1300	23	22	0	0	30	0	0	2	10

DATE	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)
OCT										
18...	0	0	0	0	<1	38	23	15	750	730
JAN										
23...	0	0	1	0	<3	8	6	2	350	330
APR										
17...	0	0	0	0	<3	6	4	2	270	260
JUL										
24...	10	0	0	0	<3	8	6	2	420	380

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT										
18...	20	--	--	--	40	40	4	.0	.0	.0
JAN										
23...	20	--	--	--	20	20	4	.0	.0	.0
APR										
17...	10	120	0	150	0	0	2	.0	.0	.0
JUL										
24...	40	9	9	0	30	20	7	.1	.0	.1

< Actual value is known to be less than the value shown.

10277400 OWENS RIVER BELOW TINEMAHA RESERVOIR, NEAR BIG PINE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT									
18...	0	0	0	0	0	0	30	20	6
JAN									
23...	0	0	0	1	1	0	20	20	4
APR									
17...	0	0	0	0	0	0	10	7	<3
JUL									
24...	0	0	0	0	0	0	20	10	9

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PCB, TOTAL (UG/L)
OCT					
18...	1600	--	3.4	.8	--
NOV					
16...	0730	3.2	--	--	--
16...	0830	--	--	--	ND
DEC					
28...	0920	3.7	--	--	--
JAN					
23...	0840	--	3.0	1.7	--
FEB					
27...	0800	4.2	--	--	ND
MAR					
30...	1230	3.1	--	--	--
APR					
17...	0800	--	2.9	--	--
MAY					
21...	1700	--	--	--	ND
21...	1715	5.2	--	--	ND
JUN					
26...	1045	3.6	--	--	--
JUL					
24...	1300	--	4.3	.3	--
AUG					
22...	1145	6.2	--	--	ND
SEP					
25...	1300	.8	--	--	--

DATE	TIME	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)
NOV										
16...	0830	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB										
27...	0800	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY										
21...	1700	ND	ND	ND	ND	ND	ND	ND	ND	ND
21...	1715	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG										
22...	1145	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)
NOV										
16...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB										
27...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY										
21...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
21...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG										
22...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Actual value is known to be less than the value shown.

ND Material specifically analyzed for but not detected.

10277400 OWENS RIVER BELOW TINEMAHA RESERVOIR, NEAR BIG PINE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	OCT 10,78		NOV 16,78		MAR 30,79		MAY 21,79	
TIME	1600		0730		1230		1715	
TOTAL CELLS/ML	19000		3900		4200		1100	
DIVERSITY: DIVISION	0.8		0.4		0.8		0.6	
.CLASS	0.8		0.4		0.8		0.6	
..ORDER	1.4		0.6		1.1		1.5	
...FAMILY	1.5		0.6		1.1		1.9	
....GENUS	2.0		0.8		1.2		2.5	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	*	0	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	35	1	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-
....TREUBARIA	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....SCENEDESMUS	*	0	70	2	--	-	51	5
..TETRASPORALES								
...COCCOMYXACEAE								
....ELAKATOTHRIX	*	0	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	130	3	51	5
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	2200	11	3500#	89	3200#	75	64	6
....MELOSIRA	11000#	57	70	2	67	2	100	9
....STEPHANODISCUS	--	-	--	-	--	-	450#	40
..PENNALES								
...ACHNANTHACEAE								
....COCCONEIS	--	-	--	-	34	1	13	1
....RHOICOSPHENIA	*	0	--	-	--	-	--	-
...DIATOMACEAE								
....DIATOMA	--	-	--	-	--	-	--	-
...FRAGILARIACEAE								
....ASTERIONELLA	1400	7	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-	280#	25
....SYNEDRA	140	1	--	-	--	-	--	-
...NAVICULACEAE								
....DIPLONEIS	*	0	--	-	--	-	--	-
....NAVICULA	110	1	--	-	67	2	--	-
....NEIDIUM	*	0	--	-	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	220	1	110	3	67	2	90	8
...SURIRELLACEAE								
....SURIRELLA	*	0	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	--	-	--	-	26	2
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	500	3	110	3	--	-	--	-
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	3200#	17	--	-	--	-	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	670#	16	--	-
...RIVULARIACEAE								
....RAPHIDIOPSIS	--	-	35	1	--	-	--	-

See footnotes at end of table.

10277400 OWENS RIVER BELOW TINEMAHA RESERVOIR, NEAR BIG PINE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	JUN 26,79	AUG 22,79	SEP 25,79
TIME	1045	1145	1300
TOTAL CELLS/ML	2900	36000	1100
DIVERSITY: DIVISION	1.2	0.4	0.9
.CLASS	1.2	0.4	0.9
..ORDER	1.6	0.4	1.1
...FAMILY	1.9	0.5	1.2
....GENUS	2.2	0.5	1.2

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...CHARACIACEAE						
....SCHROEDERIA	--	-	*	0	--	-
...OOCYSTACEAE						
....ANKISTRODESMUS	52	2	--	-	--	-
....DICTYOSPHAERIUM	52	2	33000#	93	--	-
....OOCYSTIS	--	-	*	0	--	-
....TREUBARIA	*	0	*	0	--	-
...SCENEDESMACEAE						
....SCENEDESMUS	--	-	*	0	--	-
..TETRASPORALES						
...COCCOMYXACEAE						
....ELAKATOTHRIX	--	-	*	0	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	*	0	*	0	13	1
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	39	1	*	0	--	-
....MELOSIRA	130	5	730	2	260#	23
....STEPHANODISCUS	130	5	--	-	--	-
..PENNALES						
...ACHNANTHACEAE						
....COCCONEIS	--	-	--	-	13	1
....RHOICOSPHENIA	--	-	--	-	--	-
...DIATOMACEAE						
....DIATOMA	64	2	--	-	--	-
...FRAGILARIACEAE						
....ASTERIONELLA	180	6	--	-	--	-
....FRAGILARIA	170	6	--	-	--	-
....SYNEDRA	--	-	--	-	26	2
...NAVICULACEAE						
....DIPLONEIS	--	-	--	-	--	-
....NAVICULA	--	-	*	0	--	-
....NEIDIUM	--	-	--	-	--	-
...NITZSCHIACEAE						
....NITZSCHIA	140	5	--	-	13	1
...SURIRELLACEAE						
....SURIRELLA	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)						
.CRYPTOPHYCEAE						
..CRYPTOMONADALES						
...CRYPTOMONADACEAE						
....CRYPTOMONAS	26	1	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....ANACYSTIS	52	2	--	-	--	-
..HORMOGONALES						
...NOSTOCACEAE						
....ANABAENA	1800#	63	1700	5	800#	71
...OSCILLATORIACEAE						
....OSCILLATORIA	--	-	--	-	--	-
...RIVULARIACEAE						
....RAPHIDIOPSIS	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

10277400 OWENS RIVER BELOW TINEMAHA RESERVOIR, NEAR BIG PINE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PERIPHYTON

DATE	TIME	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	LENGTH OF EXPOSURE (DAYS)
OCT						
18...	1400	.210	.000	.079	.079	20
FEB						
27...	0800	4.86	.000	.430	.350	35
MAY						
21...	1715	1.99	.010	2.75	2.08	34
JUN						
26...	1045	.115	.006	3.42	2.89	36
JUL						
24...	1300	.766	.098	.394	.282	28

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	OCTOBER MAX	OCTOBER MIN	OCTOBER MEAN	NOVEMBER MAX	NOVEMBER MIN	NOVEMBER MEAN	DECEMBER MAX	DECEMBER MIN	DECEMBER MEAN	JANUARY MAX	JANUARY MIN	JANUARY MEAN
1	249	241	245	228	226	226	225	223	225	252	244	246
2	249	242	246	227	223	226	226	226	226	249	243	247
3	251	237	243	229	221	225	226	226	226	251	246	248
4	248	240	244	230	225	227	229	226	229	251	248	249
5	252	238	244	230	224	226	229	225	229	252	247	250
6	246	236	243	231	228	229	229	229	229	253	249	251
7	247	238	243	229	225	227	241	229	235	253	249	251
8	248	239	244	227	221	224	242	233	238	255	250	253
9	243	233	239	226	222	224	241	237	238	255	250	253
10	245	237	242	227	225	226	246	241	243	252	249	250
11	244	239	242	229	223	226	245	240	243	253	251	252
12	242	240	241	228	224	226	245	231	241	256	251	253
13	241	237	239	228	225	226	240	237	239	260	251	257
14	240	230	236	228	225	227	241	238	240	266	258	261
15	236	229	233	229	224	226	241	238	240	267	259	264
16	236	231	234	226	222	224	243	237	239	263	259	260
17	236	229	235	227	223	224	239	237	238	264	259	261
18	313	153	232	225	224	225	240	238	239	264	261	262
19	235	227	231	226	220	225	239	237	238	266	262	264
20	231	227	229	229	218	223	241	235	238	271	266	269
21	234	231	233	225	222	223	242	237	239	269	265	267
22	235	231	233	224	223	224	245	238	242	272	265	267
23	234	230	232	224	224	224	244	240	242	276	272	273
24	233	229	231	224	224	224	246	223	242	275	269	271
25	230	227	229	225	224	225	246	241	243	276	269	272
26	231	227	229	226	226	226	246	242	244	278	274	275
27	229	223	226	226	226	226	245	224	243	278	274	276
28	226	221	224	226	226	226	245	240	242	284	276	279
29	228	225	226	226	224	226	244	241	242	283	275	278
30	231	227	228	227	224	226	246	241	244	280	279	279
31	231	223	227	---	---	---	244	241	243	282	279	280
MONTH	313	153	236	231	218	225	246	223	239	284	243	262

10277400 OWENS RIVER BELOW TINEMAHA RESERVOIR, NEAR BIG PINE, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	282	278	280				---	---	---	317	310	313
2	281	277	279				---	---	---	314	308	311
3	283	278	279				---	---	---	312	287	302
4	282	277	279				---	---	---	299	285	292
5	280	275	278				---	---	---	290	265	280
6	279	273	275				---	---	---	296	269	280
7	277	272	274				---	---	---	278	269	274
8	277	272	274				---	---	---	288	274	279
9	276	272	274				---	---	---	277	269	274
10	276	273	274				---	---	---	272	264	267
11	---	---	---				---	---	---	273	269	272
12	---	---	---				---	---	---	271	263	267
13	---	---	---				311	307	309	267	260	263
14	---	---	---				311	307	309	266	256	261
15	---	---	---				310	307	309	261	250	257
16	---	---	---				312	308	311	262	251	255
17	---	---	---				375	312	313	258	248	252
18	---	---	---				319	313	315	260	247	253
19	---	---	---				315	309	313	253	248	250
20	---	---	---				312	309	311	251	238	246
21	---	---	---				311	304	308	247	238	243
22	---	---	---				311	303	307	---	---	---
23	---	---	---				313	309	312	---	---	---
24	---	---	---				314	309	312	---	---	---
25	---	---	---				311	310	311	---	---	---
26	---	---	---				311	307	310	---	---	---
27	---	---	---				312	308	310	---	---	---
28	---	---	---				313	309	311	---	---	---
29	---	---	---				315	310	313	---	---	---
30	---	---	---				318	311	315	---	---	---
31	---	---	---				---	---	---	---	---	---
MONTH	---	---	---				---	---	---	---	---	---

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	221	207	217	---	---	---	242	235	238
2	---	---	---	229	218	223	---	---	---	243	236	239
3	---	---	---	230	220	224	---	---	---	243	237	240
4	---	---	---	227	218	223	---	---	---	243	238	241
5	---	---	---	228	220	224	---	---	---	246	241	243
6	---	---	---	225	218	222	---	---	---	254	238	242
7	---	---	---	226	201	222	---	---	---	245	237	242
8	---	---	---	227	216	223	---	---	---	245	241	243
9	---	---	---	227	218	224	---	---	---	246	236	242
10	---	---	---	228	218	225	---	---	---	245	239	243
11	---	---	---	230	227	229	---	---	---	245	238	242
12	---	---	---	230	224	229	---	---	---	245	236	241
13	---	---	---	233	221	228	---	---	---	243	237	240
14	---	---	---	232	223	228	---	---	---	245	237	241
15	---	---	---	235	226	230	---	---	---	242	239	241
16	---	---	---	234	221	229	---	---	---	245	239	242
17	---	---	---	233	221	228	---	---	---	246	239	242
18	---	---	---	233	218	229	---	---	---	246	241	244
19	---	---	---	231	219	225	---	---	---	249	243	247
20	---	---	---	237	224	230	---	---	---	251	245	247
21	---	---	---	237	228	232	---	---	---	250	245	248
22	---	---	---	237	226	232	---	---	---	252	246	249
23	---	---	---	236	225	231	240	232	237	254	248	250
24	---	---	---	---	---	---	238	233	236	254	251	252
25	---	---	---	---	---	---	238	233	237	254	244	249
26	---	---	---	---	---	---	240	236	238	247	244	246
27	225	212	220	---	---	---	240	228	236	247	243	246
28	221	201	216	---	---	---	241	235	239	248	245	247
29	222	209	217	---	---	---	242	236	240	252	248	250
30	223	211	217	---	---	---	242	236	239	254	250	252
31	---	---	---	---	---	---	241	233	238	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	254	235	244
YEAR	375	153	249									

10277400 OWENS RIVER BELOW TINEMAHA RESERVOIR, NEAR BIG PINE, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.0	17.5	18.0	10.0	9.0	9.5	6.0	5.0	5.5	2.0	1.5	2.0
2	19.0	17.5	18.0	9.0	8.5	8.5	5.5	4.5	5.0	2.0	1.5	1.5
3	18.5	17.5	18.0	9.0	8.0	8.5	4.5	4.5	4.5	2.5	1.5	2.0
4	19.0	17.5	18.0	9.5	8.5	9.0	4.5	4.0	4.5	2.5	2.0	2.0
5	18.5	17.5	18.0	10.0	9.0	9.5	4.5	3.0	4.0	3.0	2.5	3.0
6	18.5	17.0	17.5	11.5	10.0	10.5	3.0	0.5	2.0	3.0	2.5	3.0
7	18.0	17.0	17.5	11.5	10.5	11.0	1.0	0.0	0.5	3.5	3.0	3.0
8	18.0	17.0	17.5	11.0	10.5	10.5	0.5	0.0	0.5	4.5	3.5	4.0
9	17.0	16.5	17.0	10.5	10.0	10.5	1.5	0.5	1.0	4.5	3.5	4.0
10	17.5	16.5	17.0	10.5	8.5	9.0	2.0	1.5	2.0	4.0	3.0	3.5
11	17.5	16.5	17.0	8.5	7.5	8.0	2.5	2.0	2.5	4.5	4.0	4.0
12	17.0	16.5	16.5	7.5	7.0	7.0	3.5	2.5	3.0	5.0	4.5	4.5
13	16.5	16.0	16.5	7.0	6.5	6.5	3.5	3.5	3.5	5.0	4.0	4.5
14	16.5	15.0	15.5	6.5	5.5	6.0	4.0	3.5	3.5	5.0	4.0	4.5
15	16.0	15.5	16.0	6.0	5.0	5.5	4.0	3.5	4.0	4.0	3.5	4.0
16	16.0	15.5	15.5	5.5	5.0	5.5	4.0	4.0	4.0	4.0	4.0	4.0
17	16.0	15.0	15.5	6.0	5.5	5.5	4.0	3.0	3.5	4.5	4.0	4.0
18	16.0	15.0	15.5	6.0	5.0	5.5	3.5	3.0	3.5	4.5	4.5	4.5
19	15.5	15.0	15.5	6.5	6.0	6.0	3.5	3.0	3.5	4.5	4.0	4.0
20	15.0	15.0	15.0	7.0	6.0	6.5	3.0	2.5	2.5	4.0	3.5	4.0
21	15.0	14.5	15.0	6.5	6.0	6.0	2.5	2.0	2.5	4.0	4.0	4.0
22	14.5	14.0	14.5	6.0	6.0	6.0	2.5	2.5	2.5	4.5	4.0	4.0
23	14.0	13.0	13.5	6.5	6.0	6.0	3.0	2.5	3.0	4.5	4.0	4.5
24	13.0	12.0	12.5	6.0	6.0	6.0	3.0	2.5	3.0	4.5	4.5	4.5
25	12.5	12.0	12.5	6.0	5.5	6.0	3.5	3.0	3.5	4.5	3.5	4.0
26	12.5	12.0	12.0	6.0	5.5	5.5	4.0	3.0	3.5	3.5	2.5	3.0
27	12.5	11.5	12.0	5.5	4.5	5.0	4.0	3.5	3.5	2.5	2.5	2.5
28	12.5	11.5	12.0	5.0	4.5	5.0	4.0	3.5	3.5	2.5	1.5	2.0
29	12.5	11.5	12.0	5.0	4.5	5.0	4.0	3.5	3.5	1.5	1.0	1.5
30	11.5	10.0	11.0	5.5	5.0	5.5	3.5	3.0	3.0	1.5	1.0	1.5
31	10.0	9.0	9.5	---	---	---	3.0	2.0	2.5	1.5	1.0	1.0
MONTH	19.0	9.0	15.0	11.5	4.5	7.0	6.0	0.0	3.0	5.0	1.0	3.5

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1.5	1.5	1.5	7.5	7.0	7.5	---	---	---	18.5	17.0	17.5
2	2.0	1.5	1.5	7.0	6.5	7.0	---	---	---	17.0	16.0	16.5
3	2.5	2.0	2.0	8.0	7.0	7.5	---	---	---	18.5	16.0	17.0
4	2.5	2.0	2.5	9.0	7.0	8.0	---	---	---	18.5	17.0	18.0
5	3.0	2.5	2.5	9.0	8.0	8.5	---	---	---	17.5	15.5	16.5
6	4.0	2.5	3.0	10.0	8.5	9.0	---	---	---	17.5	14.0	15.5
7	4.0	3.0	3.5	11.0	9.5	10.0	---	---	---	16.0	12.5	14.0
8	4.5	3.5	4.0	12.5	9.5	10.5	---	---	---	14.0	12.5	13.0
9	5.0	3.5	4.0	12.5	11.5	11.5	---	---	---	13.5	11.0	12.0
10	5.0	4.5	5.0	12.0	11.5	12.0	---	---	---	15.0	10.5	13.0
11	5.5	4.5	5.0	12.5	11.5	12.0	---	---	---	17.5	13.0	15.0
12	6.0	4.5	5.5	13.0	11.5	12.0	---	---	---	18.0	14.5	16.0
13	6.0	5.0	5.5	12.5	11.5	12.0	12.5	12.0	12.0	19.0	15.0	17.0
14	7.0	6.0	6.5	11.5	11.0	11.5	14.0	12.5	13.0	19.0	15.5	17.0
15	6.5	6.0	6.0	11.5	10.0	11.0	14.5	13.0	13.5	19.5	16.0	17.5
16	7.5	6.0	6.5	11.0	10.0	10.5	15.0	14.0	14.0	19.0	16.0	17.5
17	7.0	6.5	6.5	11.5	10.0	10.5	14.0	13.5	14.0	19.5	16.5	18.0
18	7.0	6.5	7.0	10.0	10.0	10.0	16.5	13.5	14.0	19.5	17.0	18.5
19	7.0	6.5	7.0	10.0	9.5	10.0	14.0	12.5	13.0	20.5	17.5	19.0
20	7.0	6.5	6.5	10.0	9.5	10.0	14.0	13.0	13.5	20.5	17.5	19.0
21	6.5	6.5	6.5	10.5	9.5	10.0	14.5	13.5	14.0	21.5	18.0	18.5
22	6.5	6.0	6.0	10.5	10.0	10.0	15.0	13.5	14.5	21.0	17.5	19.5
23	7.0	6.0	6.5	12.0	10.5	11.0	14.5	13.5	14.0	19.0	18.0	18.5
24	6.5	6.0	6.5	12.0	10.5	11.0	15.0	14.0	14.0	19.0	17.0	18.0
25	7.0	6.5	6.5	12.0	10.5	11.5	15.0	14.0	14.5	20.0	17.5	18.5
26	7.5	6.5	7.0	12.5	11.5	12.0	16.0	14.5	15.5	21.5	18.0	19.5
27	7.5	6.5	7.0	12.0	10.5	11.5	16.5	15.5	16.0	22.0	18.5	20.0
28	7.5	6.5	7.0	---	---	---	18.0	15.5	16.5	21.5	18.5	20.0
29	---	---	---	---	---	---	18.0	16.5	17.0	20.0	16.5	18.0
30	---	---	---	---	---	---	18.5	17.0	17.5	21.0	14.5	17.0
31	---	---	---	---	---	---	---	---	---	23.5	14.5	18.5
MONTH	7.5	1.5	5.0	13.0	6.5	10.5	---	---	---	23.5	10.5	17.0

10277400 OWENS RIVER BELOW TINEMAHA RESERVOIR, NEAR BIG PINE, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	24.5	14.5	20.5	22.0	21.0	21.5	23.5	22.0	22.5	20.5	19.5	20.0
2	24.0	14.5	18.5	22.0	21.0	21.5	23.5	22.5	23.0	21.0	19.0	20.0
3	18.5	17.5	18.0	21.0	19.5	20.5	24.0	23.0	23.5	21.0	19.5	20.0
4	20.5	18.0	19.5	20.5	20.0	20.0	23.5	22.5	23.0	21.5	20.0	20.5
5	21.5	19.5	20.5	20.0	19.5	19.5	23.5	22.5	23.0	21.5	20.0	21.0
6	22.0	20.5	21.0	20.5	19.0	19.5	23.0	22.5	23.0	21.5	20.0	20.5
7	22.0	18.5	20.0	20.5	19.5	20.0	23.5	22.5	23.0	21.5	20.0	20.5
8	18.5	17.5	18.0	20.5	19.5	20.0	23.0	22.5	23.0	21.5	19.5	20.5
9	18.5	17.0	17.5	20.5	20.0	20.5	23.0	22.5	22.5	21.5	20.0	20.5
10	18.5	17.0	18.0	22.0	20.0	20.5	23.0	22.5	23.0	21.5	20.0	20.5
11	19.5	18.5	19.0	22.5	20.5	21.5	23.0	22.0	22.5	21.5	20.0	20.5
12	20.0	19.5	19.5	23.0	21.0	22.0	22.0	20.5	21.5	21.5	19.5	20.5
13	20.5	19.5	20.0	23.0	22.0	22.5	21.0	20.5	20.5	21.5	20.0	21.0
14	20.5	19.0	20.0	23.0	22.0	22.5	20.5	20.0	20.5	22.0	20.5	21.0
15	20.0	19.0	19.5	23.0	22.0	22.5	20.0	19.5	20.0	21.5	20.0	20.5
16	20.5	19.0	19.5	23.0	22.0	22.5	20.5	19.5	20.0	21.0	19.5	20.0
17	20.5	19.0	19.5	25.0	22.5	23.5	20.0	20.0	20.0	20.5	19.0	19.5
18	20.0	18.5	19.5	24.5	22.5	23.5	20.0	19.0	19.5	20.5	18.5	19.5
19	19.5	17.5	18.5	23.5	22.0	22.5	20.0	19.0	19.5	20.0	18.0	19.0
20	19.0	18.5	18.5	22.0	21.5	21.5	20.0	19.5	20.0	20.0	17.5	18.5
21	19.5	19.0	19.0	22.0	20.0	21.0	20.0	18.5	19.0	19.5	17.0	18.0
22	20.5	19.5	20.0	22.5	21.0	21.5	20.0	19.0	19.5	19.5	17.0	18.0
23	21.0	19.5	20.0	22.0	21.0	21.5	20.0	19.5	20.0	19.5	17.0	18.0
24	21.5	20.5	21.0	23.0	21.5	22.5	20.0	19.0	19.5	19.5	17.0	18.0
25	21.5	20.5	21.0	23.5	22.5	23.0	20.5	19.5	20.0	20.5	17.5	18.5
26	21.5	20.0	21.0	23.5	23.0	23.0	21.5	20.0	20.5	19.0	16.0	17.5
27	22.0	21.0	21.5	23.0	22.0	22.5	21.5	20.0	20.5	18.5	15.5	17.0
28	21.5	21.0	21.5	23.0	21.5	22.5	21.5	20.5	21.0	19.5	16.0	17.0
29	22.0	20.5	21.5	23.5	22.5	23.0	21.0	20.0	20.5	19.0	16.5	17.5
30	22.0	21.5	21.5	23.0	22.5	22.5	20.5	19.5	20.0	19.0	16.5	17.5
31	---	---	---	23.0	21.5	22.0	20.5	19.5	20.0	---	---	---
MONTH	24.5	14.5	20.0	25.0	19.0	21.5	24.0	18.5	21.0	22.0	15.5	19.5
YEAR	25.0	0.0	13.0									

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 18...	1600	701	16.0	19	70
DEC 28...	0920	673	3.5	12	80
JAN 23...	0840	678	4.0	21	51
FEB 27...	0800	670	6.5	15	94
MAR 30...	1230	8.3	12.5	19	73
APR 17...	0800	648	13.0	11	86
MAY 21...	1715	648	21.0	33	88
JUN 26...	1045	721	21.5	11	83
JUL 24...	1300	654	22.5	22	57
AUG 22...	1145	718	19.0	22	76
SEP 25...	1300	667	18.0	32	81

10285700 OWENS RIVER AT KEELER BRIDGE, NEAR LONE PINE, CA

LOCATION.--Lat 36°34'46", long 118°01'06", in NE¼NW¼NW¼ sec.1, T.16 S., R.36 E., Inyo County, Hydrologic Unit 18090103, on right bank under old timber bridge 0.5 mi (0.8 km) upstream from bridge on State Highway 190, and 3.4 mi (5.5 km) southeast of Lone Pine.

DRAINAGE AREA.--2,604 mi² (6,744 km²).

PERIOD OF RECORD.--January 1927 to current year. Prior to October 1959 monthly discharge only, published in WSP 1314 and 1734.

GAGE.--Water-stage recorder and Cipolletti weir. Altitude of gage is 3,600 ft (1,097 m), from topographic map. See WSP 1734 for history of changes prior to Feb. 14, 1935. Feb. 14, 1935, to Nov. 22, 1964, water-stage recorder and Cipolletti weir at same site and datum. Nov. 23, 1964, to June 26, 1967, nonrecording gage and Cipolletti weir at same site and datum.

REMARKS.--Records poor. Natural flow affected by storage in several reservoirs, many natural lakes, diversions for irrigation, and return flow from irrigated areas. Major portion of discharge from basin is diverted through Los Angeles Aqueduct. Discharge reported herein is wasted into Owens Lake.

COOPERATION.--Records were furnished by city of Los Angeles, Department of Water and Power.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,360 ft³/s (38.5 m³/s) June 19, 1969; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 26 ft³/s (0.74 m³/s) June 4; no flow many days July to September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	4.5	9.8	11	13	13	15	7.6	3.0	.80		0
2	5.0	4.7	9.8	11	13	13	15	7.9	3.0	.50		0
3	5.0	4.7	10	11	14	13	15	7.9	9.5	.40		0
4	5.3	4.7	10	11	14	15	15	7.6	26	.50		0
5	5.3	5.0	11	11	15	14	15	7.0	15	.50		0
6	5.0	5.3	11	12	15	13	16	7.0	9.5	.40		0
7	4.5	5.5	10	12	16	13	16	6.7	7.3	.10		0
8	4.2	5.8	10	9.5	17	13	16	6.7	6.1	0		0
9	4.0	6.1	10	13	18	13	16	6.7	5.5	0		0
10	3.7	6.4	10	13	17	13	15	6.7	5.0	0		0
11	3.5	6.4	10	13	16	13	14	6.7	4.5	0		0
12	3.5	6.4	10	13	16	13	16	6.4	4.2	0		0
13	3.2	6.7	9.8	15	16	13	19	6.4	3.7	0		0
14	3.0	7.0	10	16	15	13	19	6.4	3.2	0		0
15	3.0	7.3	11	14	15	13	15	6.1	3.0	0		0
16	3.0	7.3	12	13	15	13	13	5.8	3.0	0		0
17	3.0	7.6	12	13	15	13	12	5.8	2.8	0		0
18	3.0	7.6	12	13	15	13	11	5.5	2.8	0		0
19	3.0	7.9	13	13	15	13	10	5.3	2.6	0		.10
20	3.2	7.9	13	13	15	14	10	5.0	2.4	0		.10
21	3.2	7.9	13	13	15	15	9.5	5.0	2.2	0		.20
22	3.2	7.9	15	13	14	15	9.2	4.7	2.2	0		.20
23	3.2	8.2	16	12	14	15	8.8	4.5	2.0	0		.20
24	3.2	8.8	13	12	14	15	8.8	4.2	1.8	0		.30
25	3.2	9.2	12	13	14	15	8.5	4.0	1.6	0		.30
26	3.2	9.2	11	13	14	15	8.2	4.0	1.4	0		.40
27	3.2	9.2	11	13	14	15	8.2	3.7	1.2	0		.50
28	3.2	9.5	11	13	13	15	8.2	3.5	1.1	0		.50
29	3.2	9.5	11	13	---	15	7.9	3.5	.90	0		.60
30	3.2	9.5	11	13	---	15	7.9	3.2	.90	0		.80
31	3.2	---	11	13	---	15	---	3.0	---	0		---
TOTAL	113.6	213.7	349.4	391.5	417	429	378.2	174.5	137.40	3.20	0	4.20
MEAN	3.66	7.12	11.3	12.6	14.9	13.8	12.6	5.63	4.58	.10	0	.14
MAX	5.3	9.5	16	16	18	15	19	7.9	26	.80	0	.80
MIN	3.0	4.5	9.8	9.5	13	13	7.9	3.0	.90	0	0	0
AC-FT	225	424	693	777	827	851	750	346	273	6.3	0	8.3

CAL YR 1978 TOTAL 2195.40 MEAN 6.01 MAX 18 MIN .20 AC-FT 4350
WTR YR 1979 TOTAL 2611.70 MEAN 7.16 MAX 26 MIN 0 AC-FT 5180

10287000 MONO LAKE NEAR MONO LAKE, CA

LOCATION.--Lat 37°58'46", long 119°08'11", in NW¼ sec.5, T.2 N., R.26 E., Mono County, Hydrologic Unit 18090101, on west bank 1 mi (2 km) south of town of Mono Lake.

DRAINAGE AREA.--785 mi² (2,033 km²).

PERIOD OF RECORD.--June 1912 to current year. Records prior to September 1934, published in WSP 765.

GAGE.--Nonrecording gage or reference point read once a week. Gage readings have been reduced to elevations to National Geodetic Vertical Datum of 1929. Gage heights prior to October 1944 are converted to elevations to NGVD in WSP 1314.

REMARKS.--Since 1941 water diverted to Owens Lake basin via Mono tunnel, capacity, 200 ft³/s (5.66 m³/s).

COOPERATION.--Records were furnished by City of Los Angeles, Department of Water and Power.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 6,428.1 ft (1.959.28 m) July 18, 1919, present datum; minimum observed, 6,373.10 ft (1.942.521 m) Sept. 27, 1979.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation	Date	Elevation	Date	Elevation	Date	Elevation
Oct. 2	6,374.61	Feb. 7	6,374.50	May 15	6,374.51	July 23	6,373.87
20	6,374.51	15	6,374.53	23	6,374.48	Aug. 2	6,373.81
Nov. 3	6,374.53	28	6,374.55	31	6,374.42	10	6,373.70
8	6,374.50	Mar. 8	6,374.57	June 8	6,374.34	16	6,373.62
15	6,374.52	20	6,374.60	14	6,374.30	23	6,373.48
29	6,374.55	Apr. 4	6,374.71	20	6,374.15	30	6,373.40
Dec. 14	6,374.32	12	6,374.71	26	6,374.10	Sept. 6	6,373.33
29	6,374.30	18	6,374.66	July 6	6,374.00	14	6,373.25
Jan. 4	6,374.48	25	6,374.58	11	6,373.91	20	6,373.19
19	6,374.48	May 1	6,374.60	18	6,373.84	27	6,373.10
Feb. 1	6,374.49	10	6,374.53				

10287070 MILL CREEK BELOW LUNDY LAKE, NEAR MONO LAKE, CA

LOCATION.--Lat 38°01'58", long 119°12'53", in SE¼NE¼ sec.16, T.2 N., R.25 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, at road crossing 1,500 ft (457 m) downstream from Lundy Lake Dam, and 4.9 mi (7.9 km) northwest of Mono Lake Post Office.

DRAINAGE AREA.--18.1 mi² or 46.9 km² (natural flow).

PERIOD OF RECORD.--October 1942 to current year. Monthly and yearly mean discharges prior to October 1969, published in WSP 2127.

GAGE.--Water-stage recorder and Parshall flume on creek. Altitude of gage is 7,760 ft (2,365 m), from topographic map.

REMARKS.--Flow regulated for power development by Lundy Lake, capacity, 3,820 acre-ft (4.71 hm³). Records for "actual flow" include Mill Creek, Lundy powerplant tailrace, and Upper Conway ditch. Records for "natural flow" are computed as the "actual flow" plus change in contents and evaporation of Lundy Lake.

COOPERATION.--Records were furnished by Southern California Edison Co. and reviewed by the Geological Survey, in connection with a Federal Energy Regulatory Commission Project.

AVERAGE DISCHARGE (Actual flow).--38 years, 28.1 ft³/s (0.796 m³/s), 20,360 acre-ft/yr (25.1 hm³/yr).
(Natural flow).--38 years, 29.8 ft³/s (0.844 m³/s), 21,590 acre-ft/yr (26.6 hm³/yr).

EXTREMES (ACTUAL FLOW) FOR PERIOD OF RECORD (SINCE 1970).--Maximum daily discharge, 141 ft³/s (3.99 m³/s) July 28, 1978; no flow many days in 1971 and 1974.

EXTREMES (ACTUAL FLOW) FOR CURRENT YEAR.--Maximum daily discharge, 91 ft³/s (2.58 m³/s) June 16; minimum daily, 10 ft³/s (0.28 m³/s) Jan. 7-10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	13	13	12	13	12	15	34	74	85	68	18
2	28	14	13	12	13	12	15	50	75	85	68	18
3	28	13	13	12	13	11	15	62	75	83	68	18
4	28	13	13	12	13	11	15	62	76	83	67	15
5	29	14	13	12	13	11	14	62	76	82	67	12
6	29	14	13	11	13	11	14	62	80	82	66	12
7	26	14	12	10	13	11	14	62	81	81	66	12
8	24	14	12	10	13	11	14	62	81	81	65	12
9	24	14	12	10	13	11	14	42	81	80	65	12
10	24	14	12	10	13	11	14	27	81	80	65	12
11	21	13	12	29	13	11	14	27	82	79	65	12
12	18	13	12	27	13	12	14	26	83	67	64	12
13	19	13	12	12	13	12	14	27	85	78	46	12
14	19	13	12	12	13	12	14	28	86	77	31	12
15	19	13	12	12	13	12	14	38	90	77	31	12
16	17	13	12	12	13	12	14	43	91	77	30	12
17	16	13	12	13	12	13	15	60	88	76	28	12
18	16	13	12	13	12	13	16	65	86	76	28	12
19	17	13	12	13	12	13	17	64	87	76	28	11
20	17	13	12	13	12	13	17	64	86	76	28	11
21	17	13	12	13	12	13	17	64	85	75	28	11
22	17	13	12	13	12	13	17	64	85	69	28	11
23	17	13	12	13	12	14	17	64	84	50	28	11
24	17	13	12	13	12	15	17	65	84	74	28	11
25	17	13	12	13	12	15	17	61	84	73	25	11
26	17	14	12	13	12	15	17	66	84	73	19	11
27	16	14	12	13	12	15	17	67	85	72	18	11
28	15	13	12	13	12	15	18	68	85	71	18	11
29	15	13	12	13	---	15	19	71	85	70	18	11
30	14	14	12	13	---	15	20	71	85	69	18	11
31	14	---	12	13	---	15	---	72	---	69	18	---
TOTAL	623	400	378	410	352	395	469	1700	2490	2346	1290	369
MEAN	20.1	13.3	12.2	13.2	12.6	12.7	15.6	54.8	83.0	75.7	41.6	12.3
MAX	29	14	13	29	13	15	20	72	91	85	68	18
MIN	14	13	12	10	12	11	14	26	74	50	18	11
AC-FT	1240	793	750	813	698	783	930	3370	4940	4650	2560	732
(†)	1140	825	711	847	621	847	1010	4280	5860	3710	1680	832

CAL YR 1978 TOTAL -[illegible]2.6 MEAN 39.3 MAX 141 MIN 6.6 AC-FT 28430 †28590
WTR YR 1979 TOTAL 11222.0 MEAN 30.7 MAX 91 MIN 10 AC-FT 22260 †22360

† Computed natural flow, in acre-feet.

10287290 RUSH CREEK BELOW AGNEW LAKE, NEAR JUNE LAKE, CA

LOCATION.--Lat 37°45'32", long 119°07'47", in NE¼SW¼ sec.20, T.2 S., R.26 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, 500 ft (152 m) downstream from Agnew Lake Dam, and 3.4 mi (5.5 km) southwest of town of June Lake.

DRAINAGE AREA.--23.3 mi² or 60.3 km² (natural flow).

PERIOD OF RECORD.--October 1951 to current year. Monthly and yearly mean discharges prior to October 1969, published in WSP 2127.

GAGE.--Water-stage recorder and Parshall flume on creek. Altitude of gage is 8,480 ft (2,585 m), from topographic map.

REMARKS.--Flow regulated for power development by Waugh, Gem, and Agnew Lakes, combined capacity, 23,420 acre-ft (28.9 hm³) and Rush Creek powerplant. "Actual flow" is total flow of Rush Creek below Agnew Lake and Rush Creek powerplant tailrace. "Natural flow" is the sum of "actual flow," change in contents and evaporation for Waugh, Gem, and Agnew Lakes.

COOPERATION.--Records furnished by Southern California Edison Co., and reviewed by the Geological Survey, in connection with a Federal Energy Regulatory Commission Project.

AVERAGE DISCHARGE (Actual flow).--28 years, 54.6 ft³/s (1.546 m³/s), 39,560 acre-ft/yr (48.8 hm³/yr).
(Natural flow).--28 years, 58.9 ft³/s (1.668 m³/s), 42,670 acre-ft/yr (52.6 hm³/yr).

EXTREMES (ACTUAL FLOW) FOR PERIOD OF RECORD (SINCE 1970).--Maximum daily discharge, 421 ft³/s (11.9 m³/s) July 15, 1978; minimum daily, 0.90 ft³/s (0.025 m³/s) Aug. 31 to Sept. 2, 1976.

EXTREMES (ACTUAL FLOW) FOR CURRENT YEAR.--Maximum daily discharge, 108 ft³/s (3.06 m³/s) June 13; minimum daily, 21 ft³/s (0.59 m³/s) Oct. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	91	75	54	56	43	37	50	86	89	85	60
2	64	93	53	54	56	38	31	77	86	88	85	43
3	50	92	53	54	56	38	31	83	86	87	86	33
4	50	91	53	54	56	38	31	81	86	88	87	35
5	66	92	55	54	55	39	31	82	86	88	85	36
6	66	91	55	53	55	39	30	83	86	87	85	36
7	83	89	55	53	55	39	30	84	86	89	85	37
8	84	88	55	54	55	39	30	84	85	86	85	37
9	84	87	55	54	55	39	30	84	85	92	85	37
10	58	85	55	53	55	39	31	84	85	85	85	37
11	21	85	54	58	55	39	31	83	85	85	85	37
12	40	86	54	54	55	39	30	61	95	81	86	37
13	39	86	54	53	53	39	30	59	108	84	85	37
14	39	85	54	61	53	39	30	78	97	85	86	37
15	40	85	54	56	53	41	30	83	96	85	86	37
16	51	85	54	53	53	44	66	84	97	86	83	37
17	71	85	54	53	53	41	85	84	91	84	85	37
18	71	85	54	53	53	40	85	85	89	84	86	39
19	82	86	53	53	53	40	85	86	91	84	87	37
20	72	92	53	53	53	40	66	86	91	85	85	37
21	85	85	53	53	53	40	54	87	92	87	85	37
22	85	85	52	53	53	40	54	88	92	85	73	37
23	85	85	52	53	52	39	54	88	93	85	63	37
24	85	84	52	53	52	39	54	87	94	84	62	37
25	85	84	53	53	52	39	41	87	92	85	62	39
26	85	84	53	56	52	39	35	88	91	86	60	40
27	84	85	54	56	52	54	36	89	90	85	60	40
28	83	85	54	56	52	43	36	89	89	84	61	40
29	83	85	54	56	---	42	37	88	87	84	61	40
30	83	86	54	56	---	41	37	88	88	83	60	39
31	80	---	54	56	---	42	---	86	---	85	60	---
TOTAL	2139	2607	1687	1685	1506	1251	1288	2546	2705	2655	2414	1149
MEAN	69.0	86.9	54.4	54.4	53.8	40.4	42.9	82.1	90.2	85.6	77.9	38.3
MAX	85	93	75	61	56	54	85	89	108	92	87	60
MIN	21	84	52	53	52	38	30	50	85	81	60	33
AC-FT	4240	5170	3350	3340	2990	2480	2550	5050	5370	5270	4790	2280
(†)	314	486	646	874	450	906	1400	15020	14420	5130	1480	495

CAL YR 1978 TOTAL 31671 MEAN 86.8 MAX 421 MIN 13 AC-FT 62820 † 67700
WTR YR 1979 TOTAL 23632 MEAN 64.7 MAX 108 MIN 21 AC-FT 46870 † 41620

† Computed natural flow, in acre-feet.

10287400 RUSH CREEK ABOVE GRANT LAKE, NEAR JUNE LAKE, CA

LOCATION.--Lat 37°48'23", long 119°06'29", in NE¼ sec.4, T.2 S., R.26 E., Mono County, Hydrologic Unit 18090101, on left bank in narrows, 0.6 mi (1.0 km) upstream from Grant Lake, and 2.7 mi (4.3 km) northwest of town of June Lake.

DRAINAGE AREA.--51.3 mi² (132.9 km²).

PERIOD OF RECORD.--December 1936 to current year. Prior to October 1959 monthly discharge only, published in WSP 1314 and 1734.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 7,200 ft (2,195 m), from topographic map.

REMARKS.--Records poor. Flow regulated by Gem Lake, Lake Agnew, Waugh Lake, combined capacity, 23,400 acre-ft (28.9 hm³) and by many natural lakes. No diversion above station.

COOPERATION.--Records were furnished by city of Los Angeles, Department of Water and Power.

AVERAGE DISCHARGE.--42 years (water years 1938-79), 81.2 ft³/s (2.300 m³/s), 58,830 acre-ft/yr (72.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,070 ft³/s (30.3 m³/s) July 14, 1967, gage height, 6.20 ft (1.890 m); minimum daily, 5.5 ft³/s (0.16 m³/s) Sept. 6-8, 14, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 241 ft³/s (6.83 m³/s) May 28; minimum daily, 41 ft³/s (1.16 m³/s) Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	101	91	61	68	65	61	84	190	142	118	75
2	99	105	75	61	67	55	55	104	187	139	117	69
3	72	105	64	61	66	52	52	123	188	135	114	53
4	68	105	64	60	66	52	52	128	196	133	113	48
5	66	105	64	61	66	52	53	130	204	131	112	48
6	69	105	64	61	65	54	55	130	215	130	111	48
7	91	103	63	61	65	55	56	129	213	129	111	46
8	100	101	63	61	65	56	56	125	196	126	111	45
9	101	100	63	61	65	61	57	123	180	126	111	45
10	90	99	63	61	64	63	58	119	177	125	111	42
11	64	99	63	103	64	64	57	119	180	121	111	41
12	57	99	63	108	63	64	58	114	188	120	111	44
13	56	100	63	81	66	64	60	97	213	120	111	45
14	56	100	63	75	74	64	64	114	215	124	109	46
15	56	99	62	74	67	64	65	140	194	126	109	47
16	58	99	62	72	65	64	78	151	180	126	107	47
17	81	99	64	69	64	62	112	159	171	126	106	46
18	87	99	65	68	64	61	117	168	157	125	108	45
19	96	98	64	66	64	61	117	182	151	125	105	45
20	92	98	63	66	64	62	108	192	148	126	104	45
21	96	99	63	65	67	61	89	200	148	131	101	45
22	100	100	62	64	65	61	86	212	149	130	96	45
23	99	100	62	64	64	60	85	219	153	126	81	45
24	99	98	62	65	64	60	84	210	159	126	77	45
25	99	98	62	65	64	61	81	207	161	125	76	46
26	99	98	62	65	64	62	72	216	159	124	76	46
27	99	97	62	66	64	67	72	238	155	123	76	47
28	99	97	61	66	64	69	72	241	152	121	75	47
29	97	97	61	66	---	65	72	230	147	119	74	47
30	97	97	61	68	---	64	75	215	144	117	75	47
31	96	---	61	70	---	64	---	198	---	117	75	---
TOTAL	2643	3001	1985	2115	1828	1889	2179	5017	5266	3914	3092	1430
MEAN	85.3	100	64.0	68.2	65.3	60.9	72.6	162	176	126	99.7	47.7
MAX	105	105	91	108	74	69	117	241	215	142	118	75
MIN	56	97	61	60	63	52	52	84	144	117	74	41
AC-FT	5240	5950	3940	4200	3630	3750	4320	9950	10450	7760	6130	2840

CAL YR 1978 TOTAL 46949 MEAN 129 MAX 516 MIN 24 AC-FT 93120
WTR YR 1979 TOTAL 34359 MEAN 94.1 MAX 241 MIN 41 AC-FT 68150

10287900 LEE VINING CREEK NEAR LEE VINING, CA

LOCATION.--Lat 37°55'46", long 119°10'10", in SE¼NW¼SW¼ sec.24, T.1 N., R.25 E., Mono County, Hydrologic Unit 18090101, on right bank 0.8 mi (1.3 km) upstream from Gibbs Canyon, and 3.3 mi (5.3 km) southwest of Lee Vining.

DRAINAGE AREA.--34.9 mi^2 (90.4 km^2).

PERIOD OF RECORD.--April 1934 to current year. Prior to October 1959 monthly discharge only, published in WSP 1314 and 1734.

GAGE.--Water-stage recorder and partial concrete control. Altitude of gage is 7,400 ft (2,256 m), from topographic map. See WSP 1734 for history of changes prior to Aug. 6, 1944.

REMARKS.--Records poor. Flow regulated for power development by Ellery, Saddlebag, and Tioga Lakes, combined capacity, 13,269 acre-ft (16.4 hm^3) and by several small natural lakes. No diversion above station.

COOPERATION.--Records were furnished by city of Los Angeles, Department of Water and Power.

AVERAGE DISCHARGE.--45 years, 65.5 ft^3/s (1.855 m^3/s), 47,450 acre-ft/yr (58.5 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 590 ft^3/s (16.7 m^3/s) July 4, 1967, gage height, 4.42 ft (1.347 m); no flow Nov. 29, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 280 ft^3/s (7.93 m^3/s) June 6; minimum daily, 19 ft^3/s (0.54 m^3/s) Oct. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	49	35	31	36	36	24	61	178	116	52	41
2	52	38	35	42	30	28	26	52	175	87	47	38
3	63	49	36	40	32	29	28	70	190	95	54	37
4	59	43	37	33	38	24	30	77	214	98	54	37
5	55	39	38	37	31	23	27	84	260	77	51	38
6	60	33	32	31	29	26	33	73	280	80	50	40
7	53	31	28	35	32	29	30	56	280	91	52	37
8	51	33	23	38	30	26	28	61	210	77	50	33
9	55	37	25	37	32	26	33	51	175	71	41	33
10	58	33	26	36	34	27	33	39	177	71	37	33
11	51	32	24	94	29	28	24	48	200	85	43	33
12	46	36	23	43	33	38	32	53	220	86	51	33
13	45	37	23	43	36	29	37	60	265	70	41	34
14	53	41	23	44	28	29	37	90	265	105	31	40
15	44	45	23	48	38	27	39	123	205	99	32	37
16	45	37	23	46	38	27	41	121	163	92	43	37
17	42	33	23	46	31	30	40	147	143	89	41	36
18	23	33	26	37	33	30	36	159	119	74	29	31
19	19	37	28	41	33	25	31	175	87	82	25	26
20	26	37	24	41	33	27	34	205	115	82	33	41
21	28	36	27	32	32	30	38	215	120	69	33	31
22	29	45	38	38	31	24	37	233	125	96	22	36
23	27	41	43	37	32	24	38	230	126	86	37	27
24	27	40	35	32	36	26	34	210	133	62	37	36
25	27	31	36	32	35	26	32	215	144	70	59	37
26	45	24	40	31	30	28	43	232	132	77	64	34
27	60	35	39	33	29	28	42	255	126	61	31	38
28	41	41	35	35	32	29	45	271	125	60	31	28
29	35	34	36	33	---	29	53	240	122	59	33	29
30	43	33	35	29	---	32	57	212	120	57	40	38
31	53	---	34	37	---	27	---	191	---	57	41	---
TOTAL	1360	1113	953	1204	913	853	1062	4309	5192	2481	1285	1033
MEAN	43.9	37.1	30.7	38.8	32.6	27.5	35.4	139	173	80.0	41.5	34.4
MAX	63	49	43	94	38	32	57	271	280	116	64	41
MIN	19	24	23	29	28	23	24	39	87	57	22	26
AC-FT	2700	2210	1890	2390	1810	1690	2110	8550	10300	4920	2550	2050

CAL YR 1978 TOTAL 28152 MEAN 77.1 MAX 320 MIN 13 AC-FT 55840
WTR YR 1979 TOTAL 21758 MEAN 59.6 MAX 280 MIN 19 AC-FT 43160

11012000 COTTONWOOD CREEK ABOVE TECATE CREEK, NEAR DULZURA, CA

LOCATION.--Lat 32°34'30", long 116°45'11", in NW¼NW¼SW¼ sec.26, T.18 S., R.2 E., San Diego County, Hydrologic Unit 18070305, on right bank 0.8 mi (1.3 km) upstream from confluence with Tecate Creek, and 5.1 mi (8.2 km) south of Dulzura.

DRAINAGE AREA.--310 mi^2 (803 km^2).

PERIOD OF RECORD.--October 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 569.40 ft (173.553 m) National Geodetic Vertical Datum of 1929 (levels by International Boundary and Water Commission).

REMARKS.--Records good. Flow regulated by Morena Reservoir, capacity, 50,120 acre-ft (61.8 hm^3) and Barrett Reservoir, capacity, 44,760 acre-ft (55.2 hm^3). Water diverted from Barrett Reservoir through San Diego and Dulzura conduits to Lower Otay Reservoir.

AVERAGE DISCHARGE.--43 years, 6.33 ft^3/s (0.179 m^3/s), 4,590 acre-ft/yr (5.66 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,340 ft^3/s (123 m^3/s) Feb. 7, 1937, gage height, 9.65 ft (2.941 m) from rating curve extended above 1,500 ft^3/s (42.5 m^3/s); no flow for part of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 494 ft^3/s (14.0 m^3/s) Mar. 28, gage height, 5.95 ft (1.814 m); no flow many months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.35	1.3	42	26	325	8.0	2.2	.01		
2		0	.49	1.2	55	52	305	8.4	2.4	.01		
3		0	.31	1.2	44	33	277	8.1	2.3	.01		
4		0	.27	1.2	34	26	250	7.2	2.0	.02		
5		0	.32	2.7	29	23	225	7.2	1.9	.03		
6		0	.36	10	25	20	203	6.9	1.8	.02		
7		0	.29	5.4	23	18	187	7.0	1.8	.02		
8		0	.27	3.5	21	16	175	7.6	1.9	.01		
9		0	.30	3.1	19	15	178	7.9	1.2	0		
10		0	.32	2.9	17	14	165	6.7	.73	0		
11		0	.30	2.6	15	12	136	5.7	.43	0		
12		0	.30	2.5	13	11	98	4.7	.30	0		
13		0	.30	2.2	12	11	95	4.0	.20	0		
14		0	.30	2.0	14	10	93	3.4	.13	0		
15		0	.33	2.1	14	9.6	90	2.9	.09	0		
16		0	.33	5.2	13	9.8	88	2.9	.09	0		
17		0	4.0	9.2	12	19	86	2.7	.17	0		
18		0	14	15	11	25	84	2.4	.42	0		
19		0	21	15	10	25	81	2.5	.40	0		
20		0	9.7	11	9.7	49	78	2.9	.36	0		
21		0	5.1	8.3	21	84	75	2.8	.28	0		
22		0	3.6	6.7	33	63	72	2.3	.23	0		
23		0	2.8	5.6	28	44	69	2.1	.14	0		
24		2.5	2.3	6.0	29	38	61	1.9	.11	0		
25		.90	2.1	8.0	21	34	19	1.8	.13	0		
26		.46	1.8	8.9	18	31	13	1.8	.10	0		
27		.34	1.6	6.3	16	45	11	1.9	.06	0		
28		.27	1.6	7.9	15	356	9.8	1.9	.03	0		
29		.25	1.5	11	---	208	9.0	2.0	.02	0		
30		.25	1.4	8.4	---	253	8.3	2.0	.02	0		
31		---	1.2	15	---	311	---	2.1	---	0		---
TOTAL	0	4.97	78.84	191.4	613.7	1891.4	3558.1	131.7	21.96	.13	0	0
MEAN	0	.17	2.54	6.17	21.9	61.0	119	4.25	.73	.004	0	0
MAX	0	2.5	21	15	55	356	325	8.4	2.4	.03	0	0
MIN	0	0	.27	1.2	9.7	9.6	8.3	1.8	.02	0	0	0
AC-FT	0	9.9	156	380	1220	3750	7060	261	44	.3	0	0

CAL YR 1978 TOTAL 7480.99 MEAN 20.5 MAX 776 MIN 0 AC-FT 14840
WTR YR 1979 TOTAL 6492.18 MEAN 17.8 MAX 356 MIN 0 AC-FT 12880

11012500 CAMPO CREEK NEAR CAMPO, CA

LOCATION.--Lat 32°35'28", long 116°31'29", in SW¼NE¼SE¼ sec.24, T.18 S., R.4 E., San Diego County, Hydrologic Unit 18070305, on left bank just upstream from bridge on State Highway 94, and 3.5 mi (5.6 km) southwest of Campo.

DRAINAGE AREA.--85.0 mi² (220.2 km²), of which 3 mi² (8 km²) are in Mexico.

PERIOD OF RECORD.--October 1936 to current year.

GAGE.--Water-stage recorder and broad-crested weir. Datum of gage is 2,178.92 ft (664.135 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 1, 1954, at datum 1 ft (0.3 m) higher.

REMARKS.--Records good. Flow regulated by small conservation reservoir 1 mi (1.6 km) upstream since August 1956. No diversion above station.

AVERAGE DISCHARGE.--43 years, 1.57 ft³/s (0.044 m³/s), 1,140 acre-ft/yr (1.41 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 880 ft³/s (24.9 m³/s) Feb. 6, 1937, gage height, 4.80 ft (1.463 m), present datum, from rating curve extended above 110 ft³/s (3.12 m³/s) on basis of velocity-area study and cross-sectional area at control; no flow for part of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 59 ft³/s (1.67 m³/s) Mar. 28, gage height, 2.34 ft (0.713 m); minimum daily, 0.08 ft³/s (0.002 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.32	.41	.48	2.9	3.2	11	4.9	2.3	.66	.35	.36
2	.10	.34	.54	.38	2.8	7.6	9.9	5.7	2.4	.71	.36	.34
3	.13	.35	.33	.41	2.7	4.6	8.2	5.6	2.4	.76	.37	.31
4	.29	.35	.29	.43	2.5	3.5	7.1	5.0	2.3	.75	.38	.30
5	.38	.34	.39	.72	2.3	3.2	9.1	4.5	2.3	.73	1.4	.31
6	.22	.33	.47	.83	2.3	2.9	7.5	4.5	2.2	.72	.72	.30
7	.09	.25	.34	.59	2.2	2.8	7.0	4.0	2.2	.70	.49	.31
8	.09	.22	.24	.54	2.1	2.8	6.9	3.5	2.1	.65	.33	.35
9	.09	.21	.29	.55	2.1	2.8	6.9	3.5	1.7	.63	.32	.30
10	.09	.25	.32	.54	2.1	2.6	7.1	3.2	1.6	.60	.31	.27
11	.19	.37	.30	.53	2.1	2.9	6.3	3.0	1.5	.60	.29	.25
12	.11	.37	.30	.58	2.3	3.4	6.1	2.9	1.4	.59	.28	.25
13	.10	.38	.30	.55	2.2	3.0	5.7	2.8	1.4	.53	.34	.30
14	.09	.53	.29	.54	2.5	2.7	5.2	2.7	1.3	.40	.37	.33
15	.10	.41	.32	.62	2.5	2.6	5.2	2.7	1.2	.36	.42	.31
16	.10	.34	.31	1.5	2.6	2.7	4.8	2.7	1.2	.45	.47	.32
17	.15	.33	2.6	2.2	1.6	4.0	4.9	2.7	1.3	.45	.45	.31
18	.18	.32	1.9	2.2	1.9	4.3	4.5	2.6	1.3	.47	.44	.30
19	.33	.31	1.8	2.1	2.2	4.5	4.4	2.7	1.3	.53	.44	.33
20	.54	.32	.95	1.6	2.2	11	4.2	2.8	1.2	.52	.81	.32
21	.50	.37	.67	1.3	2.9	21	4.3	2.8	1.2	.44	.50	.32
22	.34	.63	.61	1.3	3.1	13	4.3	2.5	1.2	.33	.42	.30
23	.19	.43	.55	1.3	3.1	8.5	4.0	2.4	1.1	.12	.38	.29
24	.34	1.5	.56	1.5	3.3	6.2	4.1	2.4	1.1	.37	.36	.28
25	.34	.72	.50	1.9	3.0	5.5	4.4	2.4	.98	.42	.34	.27
26	.33	.49	.46	2.1	2.8	5.4	4.3	2.4	.89	.45	.34	.24
27	.29	.39	.45	1.8	2.7	7.2	4.5	2.4	.80	.50	.34	.24
28	.27	.32	.47	2.1	2.6	45	4.6	2.4	.70	.65	.35	.30
29	.26	.32	.49	2.3	---	34	4.8	2.4	.69	.59	.41	.27
30	.28	.32	.46	1.9	---	19	4.9	2.4	.67	.36	.40	.30
31	.30	---	.44	2.1	---	14	---	2.3	---	.35	.38	---
TOTAL	6.89	12.13	18.35	37.51	69.6	255.9	176.2	98.8	43.93	16.29	13.96	8.98
MEAN	.22	.40	.59	1.21	2.49	8.25	5.87	3.19	1.46	.53	.45	.30
MAX	.54	1.5	2.6	2.3	3.3	45	11	5.7	2.4	.76	1.4	.36
MIN	.08	.21	.24	.38	1.6	2.6	4.0	2.3	.67	.12	.28	.24
AC-FT	14	24	36	74	138	508	349	196	87	32	28	18

CAL YR 1978 TOTAL 790.47 MEAN 2.17 MAX 38 MIN 0 AC-FT 1570
WTR YR 1979 TOTAL 758.54 MEAN 2.08 MAX 45 MIN .08 AC-FT 1500

11013000 TIJUANA RIVER NEAR DULZURA, CA

LOCATION.--Lat 32°33'56", long 116°46'27", in E½ sec.33, T.18 S., R.2 E., San Diego County, Hydrologic Unit 18070305, on left bank 0.5 mi (0.8 km) downstream from confluence of Cottonwood and Tecate Creeks, and 5.5 mi (8.8 km) south of Dulzura.

DRAINAGE AREA.--481 mi² (1,250 km²), of which 70 mi² (181 km²) are in Mexico.

PERIOD OF RECORD.--October 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 542.42 ft (165.330 m) National Geodetic Vertical Datum of 1929 (levels by International Boundary and Water Commission). Prior to Sept. 19, 1939, at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records good. Flow regulated by Morena Reservoir, capacity, 50,210 acre-ft (61.9 hm³) and Barrett Reservoir, capacity, 44,760 acre-ft (55.2 hm³). Water diverted from Barrett Reservoir through San Diego and Dulzura conduits to Lower Otay Reservoir.

AVERAGE DISCHARGE.--43 years, 10.6 ft³/s (0.300 m³/s), 7,680 acre-ft/yr (9.47 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,700 ft³/s (133 m³/s) Feb. 7, 1937, gage height, 8.50 ft (2.591 m) present datum, from rating curve extended above 300 ft³/s (8.50 m³/s) on basis of velocity-area studies; no flow for part of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 978 ft³/s (27.7 m³/s) Mar. 28, gage height, 5.79 ft (1.765 m); minimum daily, 0.08 ft³/s (0.002 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	.20	3.1	3.1	111	62	586	12	5.4	.37	.35	.22
2	.17	.18	4.2	2.8	133	149	548	13	5.8	.34	.36	.19
3	.20	.18	3.1	2.8	95	66	507	13	5.6	.32	.37	.19
4	.14	.19	2.8	3.0	64	45	469	11	4.9	.30	.34	.16
5	.15	.18	3.2	5.6	47	35	428	9.5	5.1	.28	.41	.19
6	.17	.19	3.5	23	36	79	393	9.5	4.8	.26	.41	.19
7	.16	.16	3.1	11	30	24	359	9.6	4.8	.29	.38	.19
8	.15	.16	2.9	6.6	25	22	336	11	5.0	.39	.41	.19
9	.15	.16	2.9	6.0	22	21	323	11	4.2	.57	.41	.19
10	.16	.20	3.0	5.5	19	18	310	8.8	3.4	.61	.45	.16
11	.16	.60	2.7	5.2	16	16	251	7.4	2.5	.48	.45	.16
12	.16	4.1	2.7	5.1	14	15	167	6.4	1.6	.49	.49	.16
13	.16	1.6	2.7	4.6	12	15	164	5.5	1.3	.45	.45	.19
14	.16	4.5	2.7	4.2	20	14	161	4.8	1.0	.43	.45	.19
15	.16	2.5	2.8	4.3	15	14	161	4.5	.77	.38	.41	.19
16	.16	1.8	2.9	12	14	15	160	4.7	.68	.33	.41	.19
17	.16	1.9	30	22	12	95	159	4.7	.81	.28	.38	.19
18	.17	1.9	53	36	11	52	157	4.6	1.3	.26	.41	.16
19	.20	1.8	64	35	10	61	155	5.0	1.6	.28	.45	.16
20	.22	1.5	21	19	9.5	139	150	6.2	1.5	.30	.41	.16
21	.27	1.7	11	14	40	294	145	6.3	1.3	.28	.41	.16
22	.27	2.8	8.1	11	55	197	140	5.4	1.4	.28	.41	.16
23	.24	2.5	6.5	9.3	44	108	134	4.9	1.2	.30	.41	.18
24	.22	17	5.5	9.7	46	75	119	5.8	2.5	.28	.38	.16
25	.23	9.1	4.9	13	28	58	29	5.3	2.4	.29	.30	.10
26	.22	4.1	4.3	16	22	48	18	4.7	1.9	.30	.26	.10
27	.20	3.2	4.1	9.8	20	109	15	4.3	1.5	.31	.22	.10
28	.20	2.9	4.1	12	18	798	14	4.6	.84	.31	.22	.10
29	.19	2.8	4.0	20	---	590	13	4.5	.58	.30	.22	.10
30	.22	2.8	3.6	12	---	581	12	5.0	.43	.33	.22	.08
31	.21	---	3.6	27	---	601	---	5.0	---	.33	.22	---
TOTAL	5.83	72.90	276.0	370.6	988.5	4334	6581	218.0	76.11	10.72	11.47	4.86
MEAN	.19	2.43	8.90	12.0	35.3	140	219	7.03	2.54	.35	.37	.16
MAX	.27	17	64	36	133	798	586	13	5.8	.61	.49	.22
MIN	.14	.16	2.7	2.8	9.5	14	12	4.3	.43	.26	.22	.08
AC-FT	12	145	547	735	1960	8600	13050	432	151	21	23	9.6

CAL YR 1978 TOTAL 15325.06 MEAN 42.0 MAX 1750 MIN .11 AC-FT 30400
WTR YR 1979 TOTAL 12949.97 MEAN 35.5 MAX 798 MIN .08 AC-FT 25690

11013200 RODRIGUEZ RESERVOIR AT RODRIGUEZ DAM, BAJA CALIFORNIA, MEXICO

LOCATION.--Lat 32°26'40", long 116°54'25", Baja California, Mexico, Hydrologic Unit 18070305, at Rodriguez Dam on Rio de las Palmas, 0.2 mi (0.3 km) upstream from Arroyo Matanuco, and 10 mi (16 km) southeast of Tijuana.

DRAINAGE AREA.--977 mi^2 (2,530 km^2), of which 10 mi^2 (26 km^2) are in the United States.

PERIOD OF RECORD.--April 1937 to current year. Published with record for Tijuana River near Nestor, Calif., October 1953 to September 1957. Monthend contents for April 1937 to September 1950 published in WSP 1315-B and for October 1950 to September 1960 in WSP 1735.

GAGE.--Nonrecording gage read once a day. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by National Irrigation Commission, Mexico).

REMARKS.--Reservoir is formed by thin-shell concrete-arch dam completed in 1936; storage began in 1937. Capacity table is based on surveys made in 1927. Maximum storage at crest of spillway gates, elevation, 410.10 ft (124.998 m), 111,070 acre-ft (137 hm^3); at spillway lip, elevation, 380.08 ft (115.848 m), 74,580 acre-ft (92.0 hm^3); dead storage below outlet, elevation, 267.39 ft (81.500 m), 1,650 acre-ft (2.03 hm^3) included in contents. Reservoir stores water for irrigation of 3,000 acres (12.1 km^2) on both banks 0.5 to 5.5 mi (0.8 to 8.8 km) downstream and municipal supply for city of Tijuana. Since August 1972, Colorado River water diverted through Otay aqueduct into the reservoir for Tijuana emergency use; this year none was imported.

COOPERATION.--Records were furnished by Ministry of Hydraulic Resources, Government of Mexico, through International Boundary and Water Commission, United States section.

EXTREMES FOR PERIOD OF RECORD.--Reservoir spilled during March 1938, September 1940, February to May 1941, March 1942, February and March 1944; reservoir dry Apr. 2, 1964, to Apr. 9, 1965, Aug. 21 to Nov. 22, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 98,580 acre-ft (122 hm^3) Apr. 26; minimum observed, 71,430 acre-ft (88.1 hm^3) Jan. 15.

MONTHEND CONTENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	74,370	--
Oct. 31	73,110	-1,260
Nov. 30	72,260	-850
Dec. 31	71,690	-570
CAL YR 1978	--	+70,966
Jan. 31	73,970	+7,280
Feb. 28	82,970	+9,000
Mar. 31	97,310	+14,340
Apr. 30	98,580	+1,270
May 31	97,310	-2,540
June 30	95,160	-2,150
July 31	92,930	-2,230
Aug. 31	90,830	-2,100
Sept. 30	88,850	-1,980
WTR YR 1979	--	-14,480

11013500 TIJUANA RIVER NEAR NESTOR, CA

LOCATION.--Lat 32°33'06", long 117°05'00", on line between secs.3 and 4, T.19 S., R.2 W., San Diego County, Hydrologic Unit 18070305, on downstream side of Hollister Street bridge, 1.7 mi (2.7 km) south of Nestor, and 2.9 mi (4.7 km) upstream from mouth at Pacific Ocean.

DRAINAGE AREA.--1,695 mi² (4,390 km²), of which 1,236 mi² (3,201 km²) are in Mexico.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1914 to September 1915, October 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 15.14 ft (4.615 m) National Geodetic Vertical Datum of 1929. See WSP 1735 for history of changes prior to Aug. 5, 1958.

REMARKS.--Records good. Flow regulated by Morena Reservoir, capacity, 50,210 acre-ft (61.9 hm³) and Barrett Reservoir, capacity, 44,760 acre-ft (55.2 hm³) in the United States, and Rodriguez Reservoir (station 11013200) in Mexico. Water diverted from Cottonwood Creek at Barrett Dam by Dulzura conduit to Jamul Creek. AVERAGE DISCHARGE represents flow to the ocean regardless of upstream development.

AVERAGE DISCHARGE.--44 years, 29.1 ft³/s (0.824 m³/s), 21,080 acre-ft/yr (26.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD (SINCE 1936).--Maximum discharge, 17,700 ft³/s (501 m³/s) Feb. 7, 1937, gage height, 8.20 ft (2.499 m), datum then in use, from rating curve extended above 2,000 ft³/s (56.6 m³/s) on basis of velocity-depth relation and cross section after peak; no flow parts of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,610 ft³/s (45.6 m³/s) Mar. 29, gage height, 5.98 ft (1.823 m); no flow Oct. 1 to Nov. 10, Nov. 13, 20, Dec. 13-14, Jan. 2-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	1.2	.03	234	98	1100	26	10	2.2	3.3	2.0
2		0	4.3	0	242	146	861	26	11	2.2	3.5	1.8
3		0	2.0	0	163	119	712	26	10	1.8	3.3	1.6
4		0	1.0	0	101	66	523	25	12	2.2	3.3	1.6
5		0	.85	16	71	49	896	24	12	2.5	3.0	1.4
6		0	1.1	110	52	37	468	24	11	2.5	3.3	.67
7		0	.51	25	43	29	282	20	8.5	2.5	2.5	.94
8		0	.10	12	39	23	234	23	7.5	2.8	2.3	1.2
9		0	.10	5.3	34	19	329	21	5.8	2.8	2.2	1.4
10		0	.19	3.8	29	18	732	19	5.1	2.8	2.2	1.3
11		2.5	.19	1.6	24	15	616	17	3.8	3.3	2.3	1.3
12		11	.03	.08	21	13	197	23	3.3	3.5	2.8	1.0
13		0	0	.05	16	13	117	29	3.8	3.3	2.8	1.2
14		53	0	.38	18	11	111	24	3.8	3.3	2.8	1.4
15		5.3	.02	4.1	21	9.8	108	20	3.8	3.0	2.8	2.0
16		1.3	.03	121	15	9.1	111	21	4.4	3.5	2.8	2.2
17		.05	139	144	15	77	108	20	4.4	3.3	2.8	2.0
18		1.1	121	109	14	48	111	18	4.1	3.8	3.3	2.2
19		.19	10	97	12	93	114	19	4.1	4.8	3.3	2.2
20		0	6.0	51	9.8	152	114	19	4.1	4.1	3.0	3.7
21		22	3.0	77	46	279	120	19	5.1	3.5	2.5	7.4
22		20	1.0	18	37	310	114	21	5.5	3.3	2.3	2.5
23		7.1	.75	13	43	298	108	20	3.8	3.5	2.2	3.0
24		95	.70	11	39	705	105	17	3.0	3.5	2.2	3.0
25		37	.70	17	34	236	91	16	2.8	3.0	2.3	3.3
26		9.8	.68	13	27	200	44	13	2.8	3.3	2.2	3.3
27		3.3	.38	12	24	142	35	12	2.3	3.3	1.6	3.3
28		.12	.28	12	16	688	31	12	2.3	3.3	1.6	3.5
29		.04	.28	13	---	1460	29	12	2.3	3.5	1.4	3.3
30		.23	.08	15	---	1240	26	11	2.2	3.3	1.4	3.0
31		---	.03	217	---	1230	---	11	---	3.3	1.8	---
TOTAL	0	269.03	295.50	1118.34	1439.8	7832.9	8547	608	164.6	97.0	79.1	68.71
MEAN	0	8.99	9.53	36.1	51.4	253	285	19.6	5.49	3.13	2.55	2.29
MAX	0	95	139	217	242	1460	1100	29	12	4.8	3.5	7.4
MIN	0	0	0	0	9.8	9.1	26	11	2.2	1.8	1.4	.67
AC-FT	0	535	586	2220	2860	15540	16950	1210	326	192	157	136

CAL YR 1978 TOTAL 33863.97 MEAN 92.8 MAX 1720 MIN 0 AC-FT 67170
WTR YR 1979 TOTAL 20520.78 MEAN 56.2 MAX 1460 MIN 0 AC-FT 40700

11014550 LOWER OTAY RESERVOIR NEAR CHULA VISTA, CA

LOCATION.--Lat 32°36'33", long 116°55'45", in NE¼NE¼ sec.13, T.18 S., R.1 E., San Diego County, Hydrologic Unit 18070304, on outlet tower near right bank, 1,000 ft (305 m) west of right end of Savage Dam on Otay River, and 9 mi (14 km) east of Chula Vista.

DRAINAGE AREA.--99.0 mi² (256.4 km²).

PERIOD OF RECORD.--October 1945 to September 1959 (published with Otay River at Savage Dam, station 11014500). October 1972 to current year. Records of monthend gage heights October 1936 to September 1945, in files of San Diego County Department of Sanitation and Flood Control.

GAGE.--Nonrecording gage. Datum of gage is 347.20 ft (105.827 m) National Geodetic Vertical Datum of 1929 (levels by County of San Diego); gage readings have been reduced to NGVD. Since October 1972 to current year, supplementary water-stage recorder for flood warning only 30 ft (9.1 m) upstream from right end of dam at datum 50.0 ft (15.24 m) higher.

REMARKS.--Reservoir is formed by gravity section cyclopean concrete and masonry dam, built in 1919. Capacity from Geological Survey table dated Apr. 3, 1956. Maximum capacity at top of spillway gates, 56,520 acre-ft (69.7 hm³), elevation, 490.70 ft (149.565 m). Capacity at permanent spillway level, 49,510 acre-ft (61.0 hm³), elevation, 484.70 ft (147.737 m). Dead storage below lowest outlet, 1,150 acre-ft (1.42 hm³), elevation, 395.05 ft (120.411 m). Dulzura conduit carries water from Barrett Reservoir on Cottonwood Creek to Dulzura Creek, where water is carried to the reservoir by Jamul Creek (station 11014000). Reservoir storage includes supplemental Colorado River water. Small diversions for local use near reservoir. Water used for municipal supply by city of San Diego.

COOPERATION.--Gage heights were furnished by city of San Diego, Utilities Engineering Division.

EXTREMES FOR PERIOD OF RECORD (1945-59 AND SINCE 1972).--Maximum contents observed, 48,200 acre-ft (59.4 hm³) Oct. 31, 1945, elevation, 493.87 ft (150.532 m); minimum observed, 3,160 acre-ft (3.90 hm³) Dec. 31, 1951, elevation, 407.56 ft (124.224 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 36,600 acre-ft (45.1 hm³) Apr. 16, elevation, 471.70 ft (143.774 m); minimum observed, 27,960 acre-ft (34.5 hm³) Nov. 11, elevation, 461.2 ft (140.574 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30......................	462.06	28,610	--
Oct. 31......................	462.00	28,560	-50
Nov. 30......................	461.51	28,190	-370
Dec. 31......................	462.29	28,790	+600
CAL YR 1978................	--	--	+23,340
Jan. 31......................	463.25	29,530	+740
Feb. 28......................	466.13	31,840	+2,310
Mar. 31......................	471.10	36,070	+4,230
Apr. 30......................	471.49	36,410	+340
May 31......................	471.59	36,500	+90
June 30......................	471.39	36,330	-170
July 31......................	470.84	35,840	-490
Aug. 31......................	470.40	35,450	-390
Sept. 30......................	469.86	34,980	-470
WTR YR 1979................	--	--	+6,370

11015000 SWEETWATER RIVER NEAR DESCANSO, CA

LOCATION.--Lat 32°50'05", long 116°37'20", in NW¼SE¼ sec.25, T.15 S., R.3 E., San Diego County, Hydrologic Unit 18070304, near right bank at Los Terrenitos Road bridge, 0.7 mi (1.1 km) downstream from unnamed tributary, and 1.3 mi (2.1 km) south of Descanso.

DRAINAGE AREA.--45.4 mi² (117.6 km²).

PERIOD OF RECORD.--October 1905 to September 1927, October 1956 to current year. Monthly discharge only for October to December 1905, January to February 1916, February, March, June to September 1927, published in WSP 1315-B. Combined records of river and diversion since October 1956.

GAGE.--Water-stage recorder on river; water-stage recorder on concrete diversion. Datum of river gage is 3,269.24 ft (996.464 m) National Geodetic Vertical Datum of 1929. Prior to June 25, 1927, nonrecording gages at several sites within 0.1 mi (0.2 km) upstream at various datums. Diversion gage at different datum.

REMARKS.--Records good. No regulation above station. Sweetwater River diversion diverts 0.3 mi (0.5 km) above station for irrigation below. No flow at diversion since November 1976.

AVERAGE DISCHARGE.--Creek only: 45 years, 10.2 ft³/s (0.289 m³/s), 7,390 acre-ft/yr (9.11 hm³/yr).
Combined creek and diversion: 23 years, 5.10 ft³/s (0.144 m³/s), 3,690 acre-ft/yr (4.55 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 11,200 ft³/s (317 m³/s) Feb. 16, 1927, gage height, 13.2 ft (4.023 m), from floodmarks, site and datum then in use, on basis of slope-area measurement of maximum flow; no flow many days in most years.
Combined creek and diversion: Maximum discharge, 3,890 ft³/s (110 m³/s) Dec. 6, 1966; no flow many days in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*):

Date	Time	Creek Discharge (ft³/s)	(m³/s)	Gage height (ft)	(m)	Date	Time	Creek Discharge (ft³/s)	(m³/s)	Gage height (ft)	(m)
Jan. 31	1530	363	10.3	6.72	2.048	Mar. 21	1345	129	3.65	6.14	1.871
Feb. 21	1245	217	6.15	6.40	1.951	Mar. 28	0630	*958	27.1	7.87	2.399
Mar. 1	1830	117	3.31	6.06	1.847						

Creek only: Minimum daily discharge, no flow Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.35	1.3	2.5	121	89	107	35	11	2.7	.87	.72
2	0	.50	1.4	1.9	87	95	102	37	10	3.3	.82	.66
3	.07	.35	1.4	2.0	71	85	98	32	10	3.9	.92	.65
4	.06	.30	1.4	2.1	57	77	94	32	10	3.5	.95	.66
5	.08	.25	2.2	4.9	52	69	91	31	9.6	3.0	.94	.64
6	.10	.24	4.6	19	49	64	88	31	9.0	2.7	1.1	.58
7	.10	.23	3.6	14	50	61	84	32	9.0	2.2	1.2	.57
8	.09	.23	3.2	8.1	51	60	83	33	9.0	2.0	1.0	.58
9	.09	.24	3.5	6.8	55	58	83	34	8.5	1.7	.87	.54
10	.09	.25	4.0	5.3	57	54	84	31	8.5	1.7	.86	.51
11	.11	.30	3.7	4.0	60	52	78	28	8.5	1.7	1.0	.47
12	.10	.40	4.2	3.6	61	51	72	27	8.5	1.9	1.2	.46
13	.08	.50	3.8	1.9	62	52	66	27	8.0	1.7	1.5	.53
14	.06	.60	3.6	1.2	96	49	63	25	8.0	1.4	1.1	.55
15	.06	.55	4.2	1.2	98	47	59	24	8.0	1.4	.98	.50
16	.09	.50	4.0	7.6	87	53	56	23	8.0	1.2	.96	.49
17	.10	.45	15	14	77	61	53	22	7.5	1.1	1.1	.50
18	.12	.40	32	49	70	62	52	21	7.5	1.1	1.3	.48
19	.15	.35	47	32	65	75	50	21	7.5	1.3	1.3	.45
20	.23	.35	19	22	63	97	47	22	7.5	1.2	1.1	.49
21	.16	.40	12	18	126	114	45	20	7.4	1.4	.99	.50
22	.20	.60	9.3	17	125	106	44	18	6.8	1.3	.90	.48
23	.14	1.0	8.2	15	112	99	43	17	6.6	1.2	.75	.47
24	.26	2.0	7.3	14	104	89	43	16	6.4	1.1	.68	.50
25	.23	1.5	6.6	20	96	83	41	15	5.7	1.1	.66	.50
26	.16	1.5	6.1	18	88	78	39	15	5.2	1.0	.68	.50
27	.13	1.4	5.6	15	80	161	39	14	4.5	1.0	.68	.50
28	.14	1.4	4.8	17	74	722	38	14	4.2	1.0	.67	.51
29	.13	1.3	4.1	14	---	313	37	13	3.9	1.0	.73	.51
30	.18	1.2	3.8	14	---	145	35	12	2.4	1.0	.76	.53
31	.26	---	2.9	164	---	112	---	12	---	.94	.77	---
TOTAL	3.87	19.64	233.8	529.1	2194	3333	1914	734	226.7	52.74	29.34	16.03
MEAN	.12	.65	7.54	17.1	78.4	108	63.8	23.7	7.56	1.70	.95	.53
MAX	.26	2.0	47	164	126	722	107	37	11	3.9	1.5	.72
MIN	0	.23	1.3	1.2	49	47	35	12	2.4	.94	.66	.45
AC-FT	7.7	39	464	1050	4350	6610	3800	1460	450	105	58	32

CAL YR 1978 TOTAL 7755.26 MEAN 21.2 MAX 654 MIN 0 AC-FT 15380
WTR YR 1979 TOTAL 9286.22 MEAN 25.4 MAX 722 MIN 0 AC-FT 18420

11016550 SWEETWATER RESERVOIR NEAR NATIONAL CITY, CA

LOCATION.--Lat 32°41'20", long 117°00'35", in La Nacion Grant, San Diego County, Hydrologic Unit 18070304, at Sweetwater Dam on Sweetwater River, 6 mi (10 km) east of National City, and 8 mi (13 km) upstream from mouth.

DRAINAGE AREA.--182 mi² (471 km²).

PERIOD OF RECORD.--October 1943 to September 1966 (published with Sweetwater River at Sweetwater Dam, station 11016500). October 1972 to current year. Records of monthend gage heights October 1891 to September 1943, in files of San Diego County Department of Sanitation and Flood Control.

GAGE.--Nonrecording gage. Datum of gage is 149.28 ft (45.501 m) National Geodetic Vertical Datum of 1929 (levels by San Diego County); gage readings have been reduced to elevations above NGVD. Prior to Oct. 1, 1972 nonrecording gage at same site at datum 0.16 ft (0.049 m) lower. Oct. 1, 1972, to Mar. 6, 1975, water-stage recorder for flood warning only at same site and datum.

REMARKS.--Reservoir is formed by concrete-gravity dam. Dam completed Apr. 7, 1888, to elevation 223.82 ft (68.220 m), raised to elevation 228.82 ft (69.744 m) in 1895, and raised to elevation 243.82 ft (74.316 m) in 1911. In 1939 the spillway was completed at its present elevation. Capacity table dated December 1947. Capacity of reservoir at spillway level, 27,690 acre-ft (34.1 hm³), elevation, 238.82 ft (72.792 m). Dead storage below lowest outlet, 4.0 acre-ft (4,930 m³), elevation, 168.82 ft (51.456 m). Diversions for irrigation. Regulation at Loveland Reservoir Water is released by California-American Water Co. as required for irrigation and domestic use in Chula V , National City, and contiguous areas.

COOPERATION.--Gage heights were furnished by Sweetwater Authority of South Bay Irrigation District.

EXTREMES FOR PERIOD OF RECORD (1943-66 AND SINCE 1972).--Maximum contents observed, 27,408 acre-ft (33.8 hm³) May 21, 1979, elevation, 238.68 ft (72.750 m); minimum observed, 1,740 acre-ft (2.15 hm³) Nov. 1, 1949, elevation, 188.48 ft (57.449 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 27,408 acre-ft (33.8 hm³) May 21, elevation, 238.68 ft (72.750 m); minimum observed, 15,625 acre-ft (19.3 hm³) Nov. 18, elevation, 223.66 ft (68.172 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	226.34	17,390	--
Oct. 31	224.70	16,290	-1100
Nov. 30	223.95	15,880	-410
Dec. 31	226.45	17,460	+1580
CAL YR 1978	--	--	+12,460
Jan. 31	229.10	19,360	+1900
Feb. 28	235.24	24,290	+4930
Mar. 31	238.20	26,960	+2670
Apr. 30	238.25	27,000	+40
May 31	238.53	27,270	+270
June 30	237.15	25,990	-1280
July 31	235.14	24,210	-1780
Aug. 31	233.12	22,510	-1700
Sept. 30	231.06	20,860	-1650
WTR YR 1979	--	--	+3470

11020600 EL CAPITAN RESERVOIR NEAR LAKESIDE, CA

LOCATION.--Lat 32°53'00", long 116°48'25", in NE¼SE¼NE¼ sec.7, T.15 S., R.2 E., San Diego County, Hydrologic Unit 18070304, on outlet tower 100 ft (30 m) upstream of El Capitan Dam on San Diego, and 7 mi (11 km) east of Lakeside.

DRAINAGE AREA.--188 mi^2 (487 km^2).

PERIOD OF RECORD.--October 1936 to September 1966 (published with San Diego River at El Capitan Dam, station 11020500), October 1972 to current year. October 1936 to September 1945, published in WSP 1315-B, not equivalent owing to exclusion of greater part of flow released from Cuyamaca Reservoir.

GAGE.--Nonrecording gage. Datum of gage is 553.0 ft (168.55 m) National Geodetic Vertical Datum of 1929 (levels by city of San Diego); gage readings have been reduced to NGVD. October 1972 to current year, supplementary water-stage recorder used for flood warning only on left side of outlet tower at datum 110.0 ft (33.53 m) higher.

REMARKS.--Reservoir is formed by hydraulic fill-rock embankment, completed in 1935. Capacity table dated Mar. 29, 1956. Capacity of reservoir at spillway level, 112,810 acre-ft (139 hm^3), elevation, 750.00 ft (228.600 m). Dead storage below lowest outlet, 59.2 acre-ft (73,000 m^3), elevation, 574.00 ft (174.955 m). Reservoir storage includes supplemental Colorado River water. No significant diversion above reservoir. Flow partly regulated by Cuyamaca Reservoir. Water is released as required for municipal use and irrigation.

COOPERATION.--Gage heights were furnished by city of San Diego, Utilities Engineering Division.

EXTREMES FOR PERIOD OF RECORD (1945-66 AND SINCE 1972).--Maximum contents observed, 80,420 acre-ft (99.2 hm^3) Apr. 20, 1979, elevation, 727.10 ft (221.620 m); minimum observed, 2,252 acre-ft (2.78 hm^3) May 1, 1957, elevation, 606.28 ft (184.794 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 80,420 acre-ft (99.2 hm^3) Apr. 20, elevation, 727.10 ft (221.620 m); minimum observed, 48,520 acre-ft (59.8 hm^3) Dec. 16, elevation, 697.62 ft (212.635 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	707.84	58,430	--
Oct. 31	702.68	53,290	-5,140
Nov. 30	698.66	49,480	-3,810
Dec. 31	698.70	49,520	+40
CAL YR 1978	--	--	+39,060
Jan. 31	701.04	51,720	+2,200
Feb. 28	712.62	63,470	+11,750
Mar. 31	724.92	77,700	+14,230
Apr. 30	726.80	80,040	+2,340
May 31	724.16	76,770	-3,270
June 30	719.76	71,510	-5,260
July 31	718.46	70,000	-1,510
Aug. 31	715.50	66,640	-3,360
Sept. 30	711.05	61,780	-4,860
WTR YR 1979	--	--	+3,350

11022100 SAN VICENTE RESERVOIR NEAR LAKESIDE, CA

LOCATION.--Lat 32°54'45", long 116°55'25", in SE¼SW¼NW¼ sec.31, T.14 S., R.1 E., San Diego County, Hydrologic Unit 18070304, at outlet tower near center of upstream face of San Vicente Dam on San Vicente Creek, and 3.0 mi (5.8 km) north of Lakeside.

DRAINAGE AREA.--74.2 mi² (192.2 km²).

PERIOD OF RECORD.--October 1946 to September 1961 (published as San Vicente Creek at San Vicente Dam, at Foster, station 11022000), October 1972 to current year.

GAGE.--Nonrecording gage. Datum of gage is 460.0 ft (140.208 m) National Geodetic Vertical Datum of 1929 (levels by County of San Diego); gage readings have been reduced to elevations NGVD. October 1972 to current year, supplementary water-stage recorder used for flood warning only, at same site at datum 100 ft (30.5 m) higher.

REMARKS.--Reservoir is formed by concrete-gravity dam, constructed in 1941-43 by city of San Diego; storage began during construction period. Capacity table is dated Feb. 18, 1944. Capacity of reservoir at spillway level, 90,230 acre-ft (111 hm³), elevation, 650 ft (198.1 m). Dead storage below lowest outlet, 350 acre-ft (432,000 m³), elevation, 493.0 ft (150.27 m). Reservoir storage includes supplemental water from the San Diego River, Santa Ysabel Creek, and Colorado River basins. No diversion above reservoir. Water is released as required for municipal use.

COOPERATION.--Gage heights were furnished by city of San Diego, Utilities Engineering Division.

EXTREMES FOR PERIOD OF RECORD (1946-61 AND SINCE 1972).--Maximum contents observed, 90,230 acre-ft (111 hm³), spilling, Apr. 6, 1978, elevation, 650.00 ft (198.120 m); minimum observed, 12,390 acre-ft (15.3 hm³) Nov. 1, 1947, elevation, 549.22 ft (167.402 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 85,270 acre-ft (105 hm³), June 4, elevation, 645.31 ft (196.690 m); minimum observed, 67,310 acre-ft (83.0 hm³) Oct. 13, elevation, 627.20 ft (191.189 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	628.80	68,770	--
Oct. 31	628.76	68,730	-40
Nov. 30	633.99	73,790	+5,060
Dec. 31	636.70	76,470	+2,680
CAL YR 1978	--	--	+7,040
Jan. 31	636.35	76,100	-370
Feb. 28	636.18	75,950	-150
Mar. 31	640.72	80,530	+4,580
Apr. 30	640.72	80,530	+4,580
May 31	645.28	85,240	+2,110
June 30	645.07	85,020	-220
July 31	643.66	83,560	-1,460
Aug. 31	639.40	79,190	-4,370
Sept. 30	635.74	75,510	-3,680
WTR YR 1979	--	--	+6,740

11022500 SAN DIEGO RIVER NEAR SANTEE, CA

LOCATION.--Lat 32°49'29", long 117°03'17", in Ex Mission San Diego Grant, San Diego County, Hydrologic Unit 18070304, on right bank in Mission Gorge, 0.2 mi (0.3 km) upstream from left tributary, 6 mi (10 km) west of Santee, and 18 mi (29 km) downstream from El Capitan Reservoir.

DRAINAGE AREA.--377 mi^2 (976 km^2).

PERIOD OF RECORD.--May 1912 to December 1915, March 1916 to current year. Monthly discharge only for some periods and yearly estimates only for 1924-25, published in WSP 1315-B.

GAGE.--Water-stage recorder. Altitude of gage is 180 ft (54.9 m), from topographic map. Prior to Nov. 10, 1920, nonrecording gage at site 1.5 mi (2.4 km) upstream at different datum. Nov. 10, 1920, to Dec. 1, 1954, water-stage recorder at present site at datum 1.0 ft (0.30 m) higher.

REMARKS.--Records fair. Flow regulated by Cuyamaca Reservoir, capacity, 11,540 acre-ft (46.7 hm^3), El Capitan Reservoir (station 11020500), and San Vicente Reservoir (station 11022000). Diversions by city of San Diego for municipal supply and by Helix Irrigation District. AVERAGE DISCHARGE represents flow to ocean during period of record, regardless of upstream development.

AVERAGE DISCHARGE.--66 years (water years 1913-15, 1917-79), 22.5 ft^3/s (0.637 m^3/s), 16,300 acre-ft/yr (20.1 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 70,200 ft^3/s (1,990 m^3/s) Jan. 27, 1916, based on slope-conveyance computation of peak flow, gage height, 25.1 ft (7.651 m), from floodmarks, site and datum then in use; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,690 ft^3/s (76.2 m^3/s) Jan. 31; gage height, 11.26 ft (3.432 m), from rating curve extended above 1,300 ft^3/s (36.8 m^3/s); minimum daily, 1.7 ft^3/s (0.048 m^3/s) Oct. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	2.9	8.9	11	600	171	81	25	8.1	6.0	4.9	4.8
2	2.3	2.9	15	10	364	105	66	27	8.0	6.0	4.9	4.8
3	2.5	3.0	13	9.9	260	55	55	22	7.9	5.9	4.9	4.8
4	2.7	3.0	9.9	9.4	143	43	47	23	7.8	5.9	4.9	4.8
5	2.8	3.0	8.6	24	98	36	42	29	7.8	5.8	4.9	4.8
6	3.0	3.1	8.9	517	70	32	40	26	7.7	5.8	4.9	4.8
7	3.1	3.1	8.6	93	64	29	38	23	7.6	5.7	4.9	4.8
8	3.1	3.1	8.0	66	56	27	36	17	7.5	5.7	4.9	4.8
9	3.0	3.1	7.6	51	40	26	34	16	7.4	5.7	4.9	4.8
10	3.0	20	7.3	37	42	25	34	16	7.4	5.6	4.9	4.8
11	3.0	120	7.1	25	40	25	30	15	7.3	5.6	4.9	4.8
12	3.0	58	7.0	22	30	25	27	15	7.2	5.5	4.9	4.8
13	2.9	25	6.8	22	35	26	26	14	7.1	5.5	4.9	4.8
14	2.6	60	6.7	20	60	25	24	13	7.1	5.4	4.9	4.8
15	2.2	23	6.6	26	30	24	25	12	7.0	5.4	4.9	4.8
16	2.0	10	7.3	140	31	30	24	11	6.9	5.4	4.9	4.7
17	1.9	6.5	223	111	28	232	24	10	6.9	5.3	4.9	4.7
18	1.8	5.2	135	210	26	76	23	9.8	6.8	5.3	4.9	4.7
19	1.7	4.6	239	169	24	161	22	9.7	6.7	5.3	4.8	4.7
20	2.0	4.0	63	72	25	163	21	9.6	6.7	5.2	4.8	4.7
21	2.7	110	28	50	93	124	18	9.4	6.6	5.2	4.8	4.7
22	2.8	37	21	40	91	77	21	9.3	6.5	5.2	4.8	4.7
23	2.8	19	19	35	85	53	21	9.2	6.5	5.1	4.8	4.7
24	3.2	144	17	31	52	46	20	9.1	6.4	5.1	4.8	4.7
25	3.3	98	16	33	37	44	20	8.9	6.4	5.0	4.8	4.7
26	3.3	31	15	40	31	42	18	8.8	6.3	5.0	4.8	4.7
27	3.3	22	14	29	27	125	19	8.7	6.3	5.0	4.8	4.7
28	3.1	15	13	25	25	544	20	8.6	6.2	5.0	4.8	4.7
29	3.0	10	12	27	---	422	21	8.5	6.2	5.0	4.8	4.7
30	2.8	9.3	12	24	---	179	22	8.4	6.1	5.0	4.8	4.7
31	2.9	---	11	1060	---	108	---	8.3	---	5.0	4.8	---
TOTAL	83.9	810.6	975.3	3035.3	2543	3100	919	440.3	210.4	167.6	150.6	142.5
MEAN	2.71	27.0	31.5	97.9	90.8	100	30.6	14.2	7.01	5.41	4.86	4.75
MAX	3.3	144	239	1060	600	544	81	29	8.1	6.0	4.9	4.8
MIN	1.7	2.9	6.6	9.4	24	24	18	8.3	6.1	5.0	4.8	4.7
AC-FT	166	1610	1930	6020	5040	6150	1820	873	417	332	299	283

CAL YR 1978 TOTAL 23717.1 MEAN 65.0 MAX 1580 MIN 1.7 AC-FT 47040
WTR YR 1979 TOTAL 12578.5 MEAN 34.5 MAX 1060 MIN 1.7 AC-FT 24950

11023250 POWAY CREEK NEAR POWAY, CA

LOCATION.--Lat 32°57'15", long 117°00'50", in SE¼NE¼SE¼ sec.18, T.14 S., R.1 W., San Diego County, Hydrologic Unit 18070304, on right bank 100 ft (30 m) downstream from unnamed tributary, 1,000 ft (300 m) upstream from bridge on Standish Drive, and 1.4 mi (2.3 km) southeast of Poway Post Office.

DRAINAGE AREA.--7.92 mi² (20.51 km²).

PERIOD OF RECORD.--October 1969 to current year. Records prior to October 1977 available in files of the Laguna Niguel Subdistrict office.

GAGE.--Water-stage recorder. Altitude of gage is 540 ft (165 m), from topographic map.

REMARKS.--Records poor. Flow partly regulated by small conservation reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 375 ft³/s (10.6 m³/s) Mar. 5, 1978, gage height 6.15 ft (1.875 m); no flow many months each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 57.2 ft³/s (1.62 m³/s) Mar. 28, gage height, 4.71 ft (1.436 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	.40	16	7.2	6.6	1.7	.04	.01	0	
2		0	0	.60	10	5.5	6.6	1.8	.04	.01	0	
3		0	0	.50	6.0	4.8	5.7	1.7	.04	.01	0	
4		0	0	.40	5.4	4.6	5.2	1.7	.04	.01	0	
5		0	0	.20	4.8	4.2	4.9	1.5	.04	.01	0	
6		0	0	8.7	4.0	4.2	4.8	1.6	.04	.01	0	
7		0	0	2.5	4.4	4.2	4.7	1.3	.04	.01	0	
8		0	0	1.7	4.2	4.0	4.6	1.0	.04	.01	0	
9		0	0	1.9	4.2	3.5	4.8	.70	.03	.01	.50	
10		0	0	1.6	4.1	3.2	4.5	.50	.03	0	1.2	
11		1.0	0	1.0	4.0	3.9	3.7	.30	.03	0	.40	
12		.50	0	1.0	4.1	4.8	3.7	.20	.03	0	.10	
13		.20	0	.90	3.9	4.8	4.2	.10	.03	0	.05	
14		.02	0	.60	4.4	4.8	4.2	.08	.03	0	.01	
15		.02	0	.30	4.2	4.8	4.2	.07	.02	0	.01	
16		.02	0	2.8	4.2	4.8	4.2	.07	.02	0	0	
17		.02	0	2.9	4.2	5.2	4.2	.06	.02	0	0	
18		.01	4.2	4.0	4.2	4.2	4.2	.06	.02	0	0	
19		.01	3.2	4.6	4.1	5.0	3.7	.50	.02	0	0	
20		.01	2.7	3.7	4.0	5.7	3.2	.40	.02	1.5	0	
21		.02	2.2	3.5	5.0	5.4	3.2	.25	.02	1.0	0	
22		.50	2.2	3.1	5.3	4.0	3.3	.26	.02	.75	0	
23		.10	2.2	3.1	5.6	4.6	2.7	.20	.02	.50	0	
24		.80	1.8	3.1	4.8	4.2	2.7	.15	.01	.20	0	
25		.40	1.8	3.2	4.4	4.2	2.7	.10	.01	.10	0	
26		.20	1.4	3.0	4.2	4.2	2.1	.06	.01	.05	0	
27		.10	1.4	2.7	4.2	5.4	2.1	.05	.01	0	0	
28		.05	1.4	3.1	4.2	29	2.0	.05	.01	0	0	
29		.02	1.4	3.3	---	16	2.0	.04	.01	0	0	
30		0	1.0	3.0	---	9.9	2.1	.04	.01	0	0	
31		---	1.0	17	---	7.7	---	.04	---	0	0	---
TOTAL	0	4.00	27.9	89.40	142.6	189.1	116.1	16.68	.75	4.19	2.27	0
MEAN	0	.13	.90	2.88	5.09	6.10	3.87	.54	.025	.14	.073	0
MAX	0	1.0	4.2	17	16	29	6.6	1.8	.04	1.5	1.2	0
MIN	0	0	0	.20	3.9	3.2	2.0	.04	.01	0	0	0
AC-FT	0	7.9	55	177	283	375	230	33	1.5	8.3	4.5	0

CAL YR 1978 TOTAL 1073.33 MEAN 2.94 MAX 119 MIN 0 AC-FT 2130
WTR YR 1979 TOTAL 592.99 MEAN 1.62 MAX 29 MIN 0 AC-FT 1180

11023310 RATTLESNAKE CREEK AT POWAY, CA

LOCATION.--Lat 32°57'07", long 117°02'56", in NE¼SE¼SE¼ sec.14, T.14 S., R.2 W., San Diego County, Hydrologic Unit 18070304, on right bank 400 ft (122 m) above mouth, and 1.0 mi (1.6 km) southwest of Poway Post Office.

DRAINAGE AREA.--8.13 mi² (21.1 km²).

PERIOD OF RECORD.--October 1977 to current year. Record prior to October 1977 is available in files of the subdistrict office.

GAGE.--Water-stage recorder. Altitude of gage is 457 ft (139 m), from topographic map.

REMARKS.--Records poor. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 285 ft³/s (8.07 m³/s) Jan. 10, 1978, gage height, 1.20 ft (0.366 m), from rating curve extended above 100 ft³/s (2.83 m³/s) on basis of step-backwater computations and slope conveyence at 1.20 ft (0.366 m); no flow for much of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) from rating curve extended as explained above, and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 18	2230	*271	7.67	1.17	0.357	Jan. 31	1100	125	3.54	0.81	0.247
Jan. 6	0300	258	7.31	1.14	0.347	Mar. 28	0800	170	4.81	0.93	0.283

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.25	.54	20	23	8.5	.62	.43	0	0	
2		0	.30	.50	11	7.6	6.8	.80	.41	0	0	
3		0	.18	.47	6.4	5.4	5.5	.62	.39	0	0	
4		0	.14	.45	5.2	4.9	5.0	.62	.38	0	0	
5		0	.12	11	4.2	4.7	4.8	.62	.36	0	0	
6		0	.12	52	3.4	3.9	4.3	.62	.34	0	0	
7		0	.10	3.8	3.3	3.2	4.3	.62	.33	0	0	
8		0	.08	2.4	3.1	3.3	4.6	.62	.31	0	0	
9		0	.06	3.6	3.2	3.3	4.3	.62	.30	0	0	
10		0	.18	2.0	3.1	3.1	4.3	.62	.28	0	0	
11		7.7	.16	1.3	3.1	3.1	3.1	.45	.26	0	0	
12		2.7	.14	1.2	3.1	3.1	3.1	.45	.25	0	0	
13		.78	.13	1.1	2.9	3.1	3.1	.45	.23	0	0	
14		1.9	.12	1.0	5.5	3.1	3.1	.27	.21	0	0	
15		.60	.10	16	3.2	2.5	3.1	.45	.20	0	.19	
16		.36	.24	5.5	3.1	4.3	3.1	.45	.18	0	0	
17		.30	16	7.2	3.2	9.4	3.1	.45	.17	0	0	
18		.02	30	21	3.1	3.8	3.1	.47	.15	0	0	
19		0	7.4	5.6	3.2	9.7	2.2	.75	.13	0	0	
20		.14	2.8	3.4	3.1	9.1	2.2	.62	.12	2.2	0	
21		2.5	1.9	3.1	11	8.7	2.2	.60	.10	0	0	
22		1.4	1.5	2.9	5.9	4.3	1.4	.59	.08	0	0	
23		.42	1.3	1.8	6.2	4.3	2.2	.57	.07	0	0	
24		4.9	1.2	2.1	3.6	3.8	1.4	.56	.05	0	0	
25		.76	1.0	2.7	3.1	3.8	1.4	.54	.04	0	0	
26		.30	.91	1.5	3.2	3.1	1.4	.52	.02	0	0	
27		.22	.82	1.6	3.1	14	.80	.51	.01	0	0	
28		.18	.76	4.0	3.3	53	.80	.49	0	0	0	
29		.16	.68	1.6	---	17	.80	.47	0	0	0	
30		.14	.63	1.6	---	11	.80	.46	0	0	0	
31		---	.58	46	---	9.8	---	.44	---	0	0	---
TOTAL	0	25.66	77.86	207.76	143.9	246.4	94.60	16.94	5.80	2.2	.19	0
MEAN	0	.85	2.51	6.70	5.14	7.95	3.15	.55	.19	.071	.006	0
MAX	0	7.7	30	52	20	53	8.5	.80	.43	2.2	.19	0
MIN	0	0	.06	.45	2.9	2.5	.80	.27	0	0	0	0
AC-FT	0	50	155	412	285	489	188	34	12	4.4	.4	0

CAL YR 1978 TOTAL 1815.80 MEAN 4.97 MAX 139 MIN 0 AC-FT 3600
WTR YR 1979 TOTAL 821.81 MEAN 2.25 MAX 53 MIN 0 AC-FT 1630

11023325 BEELER CREEK AT POMERADO ROAD NEAR POWAY, CA

LOCATION.--Lat 32°56'23", long 117°03'57", in SW¼NW¼SW¼ sec.23, T.14 S., R.2 W., San Diego County, Hydrologic Unit 18070304, on right downstream wingwall of bridge on Pomerado Road, 0.8 mi (1.3 km) upstream from Poway Creek and 1.7 mi (2.7 km) southwest of Poway Post Office.

DRAINAGE AREA.--5.46 mi² (14.14 km²).

PERIOD OF RECORD.--October 1976 to current year. Record prior to October 1976 is available in files of subdistrict office.

GAGE.--Water-stage recorder. Altitude of gage is 465 ft (142 m), from topographic map.

REMARKS.--Records fair. Flow partially regulated by several conservation reservoirs above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080 ft³/s (30.6 m³/s) Mar. 4, 1978, gage height, 8.79 ft (2.679 m), on basis of slope-area measurement of peak flow; no flow for much of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 6	0540	106	3.00	6.46	1.969	Mar. 28	1015	167	4.73	6.78	2.067
Jan. 31	1640	*237	6.71	7.03	2.143						

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	.22	104	40	5.5	.25	.13	.01	0	
2			0	.27	95	20	4.0	.22	.13	.01	0	
3			0	.33	31	15	3.2	.20	.13	.01	0	
4			0	.37	15	4.5	1.9	.19	.12	.01	0	
5			0	.42	7.5	2.7	1.1	.18	.11	.01	0	
6			0	56	4.4	2.0	.88	.18	.10	.10	0	
7			0	16	2.9	1.4	.77	.18	.09	.32	0	
8			0	6.7	2.1	1.1	1.1	.18	.09	.35	0	
9			0	5.5	1.8	.88	.61	.19	.07	.36	0	
10			0	3.8	1.3	.78	.84	.19	.07	.32	0	
11			0	2.6	1.3	.90	.43	.11	.07	.27	0	
12			0	1.9	.81	1.2	.67	.09	.06	.21	0	
13			0	1.5	1.2	1.7	.78	.07	.06	.18	0	
14			0	1.6	1.0	1.0	.38	.06	.06	.12	0	
15			0	4.6	.67	.66	.31	.13	.05	.06	0	
16			0	8.2	.67	2.5	.31	.10	.05	.03	0	
17			.02	10	.78	12	.72	.16	.04	0	0	
18			.26	37	.87	6.0	.81	.18	.04	0	0	
19			.06	38	1.7	12	.33	.18	.03	0	0	
20			.05	15	2.5	4.6	.27	.18	.03	0	0	
21			.04	8.9	10	5.7	.26	.17	.03	0	0	
22			.04	5.8	3.0	4.0	.24	.17	.02	0	0	
23			.06	4.3	6.0	2.7	.23	.17	.01	0	0	
24			.10	3.3	2.5	1.9	.65	.16	.01	0	0	
25			.16	3.3	1.3	1.4	.27	.17	.01	0	0	
26			.16	2.6	1.2	1.4	.24	.16	.01	0	0	
27			.17	2.0	1.1	5.0	.23	.18	.01	0	.04	
28			.20	1.8	.90	90	.21	.16	.01	0	0	
29			.20	1.4	---	67	.56	.15	.01	0	0	
30			.21	1.2	---	26	.30	.14	.01	0	0	
31		---	.22	96	---	11	---	.14	---	0	0	---
TOTAL	0	0	1.89	333.01	262.48	360.02	27.88	5.05	1.66	2.37	.04	0
MEAN	0	0	.061	10.7	9.37	11.6	.93	.16	.055	.077	.001	0
MAX	0	0	.26	96	104	90	5.5	.25	.13	.36	.04	0
MIN	0	0	0	.22	.67	.66	.21	.06	.01	0	0	0
AC-FT	0	0	3.7	661	521	716	55	10	3.3	4.7	.08	0

CAL YR 1978 TOTAL 2102.95 MEAN 5.76 MAX 226 MIN 0 AC-FT 4170
WTR YR 1979 TOTAL 995.09 MEAN 2.73 MAX 104 MIN 0 AC-FT 1970

11023330 LOS PENASQUITOS CREEK BELOW POWAY CREEK, NEAR POWAY, CA

LOCATION.--Lat 32°56'58", long 117°04'08", in NW¼NE¼NE¼ sec.22, T.14 S., R.2 W., San Diego County, Hydrologic Unit 18070304, on right bank at Cobblestone Creek Road, 0.2 mi (0.3 km) downstream from confluence of Poway and Pomerado Creeks, and 2.0 mi (3.2 km) southwest of Poway.

DRAINAGE AREA.--31.2 mi² (80.8 km²).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder and rain-gage attachment. Altitude of gage is 415 ft (126 m), from topographic map.

REMARKS.--Records good. Flow partly regulated by small conservation reservoirs.

AVERAGE DISCHARGE.--9 years, 4.70 ft³/s (0.133 m³/s), 3,410 acre-ft/yr (4.20 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,530 ft³/s (100 m³/s) Mar. 1, 1978, gage height, 9.85 ft (3.002 m), on basis of slope-area measurement of peak flow; no flow for parts of some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*), from rating curve extended above 150 ft³/s (4.25 m³/s) on basis of slope-area measurements at gage heights 9.58 ft (2.920 m) and 11.11 ft (3.386 m):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 18	1240	986	27.9	7.81	2.380
Jan. 6	0335	*1,500	42.5	8.45	2.576
Jan. 15	2055	239	6.77	6.28	1.914
Jan. 18	1755	389	11.0	6.70	2.042
Jan. 31	1155	544	15.4	7.05	2.149
Mar. 1	1340	422	12.0	6.78	2.067
Mar. 28	0850	593	16.8	7.15	2.179

Minimum daily discharge, 0.04 ft³/s (0.001 m³/s) Oct. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.29	1.5	1.2	214	116	28	3.9	1.1	.10	.13	.16
2	.09	.30	2.4	1.3	106	39	22	4.1	1.1	.15	.24	.16
3	.10	.17	.33	1.4	53	21	17	3.8	1.1	.16	.26	.20
4	.09	.19	.33	1.4	31	15	16	3.6	1.1	.11	.10	.21
5	.05	.25	.70	40	23	13	12	3.3	.99	.14	.10	.19
6	.05	.36	.63	297	17	9.0	11	3.1	.70	.14	.33	.16
7	.05	.25	.63	28	16	7.0	10	2.9	1.1	.10	.13	.15
8	.05	.20	.20	16	14	6.0	9.6	2.7	1.1	.07	.08	.12
9	.05	.31	.33	19	13	5.0	9.8	2.5	.80	.26	.10	.12
10	.04	2.0	.55	16	12	4.5	9.6	2.0	.80	.35	.05	.22
11	.04	45	.55	9.0	11	5.0	6.1	1.5	.65	.17	.05	.24
12	.06	18	.70	8.0	10	6.0	6.9	1.4	.64	.17	.13	.20
13	.20	4.0	.55	7.0	9.0	5.0	6.1	1.2	.51	.16	.20	.19
14	.09	11	.63	6.0	14	4.5	5.6	1.1	.66	.15	.13	.20
15	.06	3.1	1.2	60	11	4.0	5.4	1.1	.42	.14	.10	.19
16	.05	2.6	1.5	35	10	18	5.3	1.0	.30	.13	.11	.12
17	.06	1.0	107	42	10	50	5.2	.96	.32	.12	.09	.11
18	.07	.63	183	110	9.9	20	5.2	1.0	.55	.12	.05	.11
19	.09	.50	44	30	9.6	51	4.6	2.0	.98	.12	.09	.14
20	.33	1.9	9.2	20	9.6	53	4.4	1.5	.80	.25	.74	.15
21	.13	15	5.3	73	44	45	4.3	1.4	.63	1.1	.63	.17
22	.11	8.6	5.0	19	19	18	4.2	.70	.33	.60	.39	.14
23	.09	2.5	3.4	15	32	16	4.3	.55	.33	.40	.30	.15
24	.15	29	3.0	13	16	16	4.1	.70	.33	.30	.22	.16
25	.81	4.4	2.6	11	9.0	12	4.2	.55	.33	.25	.16	.10
26	.68	1.7	2.3	6.7	7.0	8.1	4.5	.43	.26	.20	.14	.20
27	.32	1.6	2.2	5.0	6.0	62	4.2	.43	.20	.20	.14	.10
28	.16	.70	2.2	16	5.0	310	4.2	.48	.26	.16	.14	.10
29	.17	.78	2.1	8.0	---	117	4.2	.48	.20	.10	.13	.10
30	.24	.70	1.9	6.5	---	56	4.0	.48	.13	.16	.14	.12
31	.91	---	1.5	277	---	36	---	.46	---	.24	.11	---
TOTAL	5.99	156.99	387.23	1177.5	742.1	1144.1	241.8	53.56	18.85	6.82	5.71	4.72
MEAN	.19	5.23	12.5	38.0	26.5	36.9	8.06	1.73	.63	.22	.18	.16
MAX	.91	45	183	297	214	310	28	4.1	1.1	1.1	.74	.24
MIN	.04	.17	.20	1.2	5.0	4.0	4.0	.43	.13	.07	.05	.10
AC-FT	12	311	768	2340	1470	2270	480	106	37	14	11	9.4

CAL YR 1978 TOTAL 7933.03 MEAN 21.7 MAX 926 MIN .04 AC-FT 15740
WTR YR 1979 TOTAL 3945.28 MEAN 10.8 MAX 310 MIN .04 AC-FT 7830

11023340 LOS PENASQUITOS CREEK NEAR POWAY, CA

LOCATION.--Lat 32°56'35", long 117°07'15", in Los Penasquitos Grant, San Diego County, Hydrologic Unit 18070304, on left bank 1.0 mi (1.6 km) downstream from Cypress Creek, and 5.5 mi (8.8 km) southwest of Poway.

DRAINAGE AREA.--42.1 mi² (109 km²).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 260 ft (79.2 m), from topographic map.

REMARKS.--Records poor. Flow partly regulated by several conservation reservoirs above station. Pumping from wells along stream for irrigation. Flow augmented by reclaimed water from Poway area.

AVERAGE DISCHARGE.--15 years, 6.35 ft³/s (0.180 m³/s), 4,600 acre-ft/yr (5.67 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,700 ft³/s (133 m³/s) revised, Mar. 1, 1978, estimated on basis of comparison with Los Penasquitos Creek below Poway, near Poway (station 11023330), gage height unknown; no flow at times in 1968, 1972, and 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11.3 m³/s) and maximum (*), from rating curve extended above 1,400 ft³/s (39.6 m³/s) on basis of slope-area measurement at gage height 7.40 ft (2.256 m):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 18	1630	833	23.6	5.55	1.692	Mar. 1	1530	422	12.0	4.40	1.341
Jan. 6	0445	*1,390	39.4	6.59	2.009	Mar. 28	1030	641	18.2	5.07	1.545
Jan. 31	1645	612	17.3	4.99	1.521						

Minimum daily discharge, 0.14 ft³/s (0.004 m³/s) Oct. 4-16 and Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.28	.28	2.4	1.1	333	128	55	7.0	1.5	.31	.23	.26
2	.28	.25	3.0	.59	171	77	45	5.6	1.4	.28	.23	.26
3	.22	.18	.45	.90	101	41	39	5.1	1.4	.30	.22	.22
4	.14	.17	.45	1.0	67	30	31	4.6	1.5	.31	.24	.20
5	.14	.17	.60	57	49	24	25	4.2	1.3	.31	.20	.20
6	.14	.21	.72	382	37	15	22	3.9	1.2	.31	.26	.22
7	.14	.20	.28	56	30	11	20	3.7	1.2	.34	.22	.24
8	.14	.31	.28	28	25	9.7	19	3.2	1.2	.29	.22	.26
9	.14	.28	.28	28	21	9.1	19	3.1	.71	.22	.21	.26
10	.14	1.7	.36	20	19	7.5	21	2.7	.58	.18	.20	.24
11	.14	44	.45	12	16	7.1	16	2.3	.48	.23	.22	.22
12	.14	52	.55	16	15	7.3	16	1.3	.39	.34	.29	.22
13	.14	6.3	.57	8.6	13	9.1	15	.78	.35	.28	.38	.22
14	.14	17	.48	7.7	30	7.4	13	.57	.40	.27	.36	.22
15	.14	6.8	.36	65	15	6.7	13	.69	.46	.25	.29	.20
16	.14	2.1	.49	81	13	15	12	1.3	.49	.23	.27	.18
17	.22	.60	108	67	11	67	13	1.2	.50	.19	.26	.16
18	.36	.54	220	103	11	20	13	1.4	.52	.18	.29	.16
19	.45	.45	63	111	11	78	12	1.8	.50	.19	.34	.14
20	.57	.60	15	94	11	96	10	3.1	.60	.60	1.9	.16
21	.57	6.6	8.1	36	62	79	9.4	2.2	.62	1.3	.55	.20
22	.45	30	5.6	26	37	43	8.9	1.7	.58	.60	.39	.22
23	.18	5.4	5.5	19	49	30	8.9	1.5	.52	.49	.29	.24
24	.18	40	3.5	17	17	23	9.0	1.4	.50	.44	.26	.26
25	.18	16	3.1	15	12	19	8.9	1.3	.50	.39	.26	.26
26	.18	6.0	2.5	16	9.4	17	8.2	1.2	.50	.32	.26	.28
27	.18	2.0	2.4	12	8.8	61	8.0	1.2	.42	.33	.26	.24
28	.18	.90	2.3	18	7.4	416	8.4	1.4	.43	.30	.26	.26
29	.22	.90	2.3	20	---	216	18	1.4	.35	.31	.26	.26
30	.28	1.3	2.1	11	---	105	21	1.3	.33	.27	.26	.26
31	.28	---	1.6	334	---	73	---	1.3	---	.24	.26	---
TOTAL	7.08	243.70	456.24	1697.07	1201.6	1747.9	537.7	73.44	21.44	10.60	10.06	6.72
MEAN	.23	8.12	14.7	54.7	42.9	56.4	17.9	2.37	.71	.34	.32	.22
MAX	.57	52	220	382	333	416	55	7.0	1.5	1.3	1.9	.28
MIN	.14	.17	.28	.59	7.4	6.7	8.0	.57	.33	.18	.20	.14
AC-FT	14	483	905	3370	2380	3470	1070	146	43	21	20	13

CAL YR 1978 TOTAL 12779.21 MEAN 35.0 MAX 1400 MIN .18 AC-FT 25350
WTR YR 1979 TOTAL 6014.40 MEAN 16.5 MAX 416 MIN .14 AC-FT 11930

11025500 SANTA YSABEL CREEK NEAR RAMONA, CA

LOCATION.--Lat 33°06'25", long 116°51'55", in SW¼NW¼NE¼ sec.27, T.12 S., R.1 E., San Diego County, Hydrologic Unit 18070304, on left bank 1.6 mi (2.6 km) downstream from Temescal Creek, and 4.5 mi (7.2 km) north of Ramona.

DRAINAGE AREA.--112 mi^2 (290 km^2).

PERIOD OF RECORD.--February 1912 to February 1923, October 1943 to current year. Monthly discharge only for February 1912, published in WSP 1315-B.

GAGE.--Water-stage recorder and concrete cutoff wall, repaired at times. Datum of gage is 847.88 ft (258.434 m) National Geodetic Vertical Datum of 1929 (levels by city of San Diego Water Department). See WSP 1315-A for history of changes prior to Feb. 3, 1923.

REMARKS.--Records good. Flow regulated by Sutherland Reservoir (station 11024000) since July 1954. Some small diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,400 ft^3/s (804 m^3/s) Jan. 27, 1916, gage height, 14.0 ft (4.27 m) datum then in use, from rating curve extended above 1,500 ft^3/s (42.5 m^3/s) on basis of slope-conveyance computation of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,180 ft^3/s (61.7 m^3/s) Mar. 28, gage height, 7.30 ft (2.225 m), from rating curve extended above 400 ft^3/s (11.3 m^3/s) on basis of slope-area measurement at gage height 9.28 ft (2.829 m); minimum daily, 0.01 ft^3/s (<0.001 m^3/s) Oct. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.63	2.6	4.8	210	135	102	24	14	4.9	2.4	2.0
2	.01	.65	3.0	4.0	125	131	88	28	14	5.0	2.6	1.9
3	.02	.65	2.5	3.9	84	61	76	27	14	5.1	2.7	1.7
4	.02	.63	2.4	3.9	56	49	69	24	14	5.4	2.6	1.6
5	.02	.60	2.5	9.0	44	42	63	22	13	5.1	2.6	1.6
6	.02	.58	2.5	123	38	37	58	22	12	4.8	2.5	1.6
7	.02	.50	2.3	35	31	35	52	22	13	4.5	2.1	1.6
8	.03	.50	2.1	19	29	33	51	23	13	4.2	2.0	1.5
9	.03	.55	2.2	15	26	31	53	24	11	4.0	1.9	1.3
10	.03	.77	2.4	14	24	29	57	22	9.3	3.8	1.8	1.1
11	.03	3.6	2.1	12	23	28	48	20	8.4	3.7	2.2	1.1
12	.04	5.8	2.1	11	22	26	45	19	8.0	3.8	3.0	1.1
13	.04	2.6	2.1	10	21	30	40	17	7.4	3.8	4.5	1.0
14	.04	3.0	2.1	9.0	30	32	38	16	7.0	3.9	4.1	.97
15	.05	2.0	2.2	12	25	28	36	16	7.0	3.7	3.5	.89
16	.05	1.7	2.3	26	21	29	34	16	7.5	3.4	3.0	.81
17	.06	1.6	18	22	20	53	33	16	8.7	3.2	2.8	.85
18	.06	1.4	77	57	19	47	33	16	9.7	3.0	2.7	.89
19	.06	1.4	88	58	18	113	32	18	9.3	2.6	3.0	.86
20	.07	1.5	31	27	18	93	31	19	8.6	12	4.0	.88
21	.08	2.1	16	22	74	198	29	18	8.1	6.9	3.5	.95
22	.09	3.4	13	19	93	113	28	17	7.7	5.2	3.0	.95
23	.10	2.4	10	17	117	72	27	16	7.6	4.4	1.7	.93
24	.10	5.1	9.1	15	66	60	27	15	7.6	3.9	1.9	1.1
25	.15	5.9	8.2	17	44	53	26	14	6.8	3.6	1.8	1.1
26	.25	4.3	7.8	19	38	49	26	14	6.8	3.4	1.8	1.0
27	.29	3.3	7.2	14	35	174	25	14	5.1	3.4	1.8	.97
28	.28	2.7	6.7	15	32	1070	25	14	5.2	3.2	1.9	.99
29	.27	2.6	6.1	17	---	265	25	14	5.0	2.9	2.0	1.1
30	.35	2.4	5.9	14	---	174	24	13	4.8	2.7	2.0	1.1
31	.55	---	5.4	173	---	124	---	14	---	2.5	2.0	---
TOTAL	3.22	64.06	346.8	809.6	1381	3416	1301	574	273.6	132.0	79.4	35.42
MEAN	.10	2.16	11.2	26.1	49.3	110	43.4	18.5	9.12	4.26	2.56	1.18
MAX	.55	5.9	88	173	210	1070	102	28	14	12	4.5	2.0
MIN	.01	.50	2.1	3.9	18	26	24	13	4.8	2.5	1.7	.81
AC-FT	6.4	129	688	1610	2740	6770	2580	1140	543	262	157	70

CAL YR 1978 TOTAL 12275.41 MEAN 33.6 MAX 1800 MIN 0 AC-FT 24350
WTR YR 1979 TOTAL 8414.90 MEAN 23.1 MAX 1070 MIN .01 AC-FT 16690

11026000 SANTA YSABEL CREEK NEAR SAN PASQUAL, CA

LOCATION.--Lat 33°05'10", long 116°54'56", in NE¼NW¼SE¼ sec.31, T.12 S., R.1 E., San Diego County, Hydrologic Unit 18070304, on left bank 1.1 mi (1.8 km) downstream from Clevenger Canyon, and 2 mi (3 km) east of San Pasqual.

DRAINAGE AREA.--128 mi² (332 km²).

PERIOD OF RECORD.--December 1905 to September 1910 and May 1911 to September 1912 (published as "near Escondido"), April 1947 to November 1955 (irrigation seasons only), April 1956 to current year. Records for October to December 1910, published in WSP 447, have been found to be in error and should not be used.

GAGE.--Water-stage recorder. Concrete control since April 1947. Altitude of gage is 510 ft (155 m), from topographic map. Dec. 17, 1905, to Sept. 30, 1912, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum.

REMARKS.--Records good except for period of no gage-height record, Mar. 15 to May 22, which is fair. Flow regulated by Sutherland Reservoir, capacity, 29,680 acre-ft (36.6 hm³) since July 1954. Small diversion above station.

EXTREMES FOR PERIOD OF RECORD (1905-12 AND SINCE 1947).--Maximum discharge observed, 8,000 ft³/s (227 m³/s) Mar. 24, 1906, gage height, 6.3 ft (1.92 m), site and datum then in use; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,310 ft³/s (65.4 m³/s) Mar. 28, gage height, 8.08 ft (2.463 m), from highwater mark in well; minimum daily, 0.02 ft³/s (0.001 m³/s) Oct. 14-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.75	3.2	6.5	271	132	130	31	17	5.0	3.0	2.3
2	.05	.82	3.8	6.0	147	179	110	33	16	5.2	3.0	2.1
3	.06	.83	3.3	6.1	98	75	95	35	16	5.4	3.1	1.7
4	.06	.79	3.0	6.0	64	60	90	32	17	5.6	3.0	1.7
5	.07	.77	3.2	11	52	53	80	30	16	5.6	3.0	1.7
6	.07	.78	3.4	180	43	46	75	28	15	5.4	3.3	1.7
7	.07	.64	3.0	54	37	42	70	29	16	5.1	2.5	1.7
8	.06	.61	2.8	24	32	39	65	29	16	4.7	2.3	1.6
9	.04	.66	2.9	19	30	36	65	30	13	4.4	2.1	1.4
10	.03	.99	3.1	17	28	31	70	29	11	4.1	2.0	1.3
11	.03	4.1	2.9	14	26	29	65	27	9.4	4.0	2.4	1.2
12	.03	9.3	2.8	13	25	28	60	25	8.8	4.2	3.9	1.2
13	.03	4.4	2.7	13	24	31	55	22	8.3	4.3	5.0	1.2
14	.02	4.8	2.7	11	32	40	50	21	7.8	4.4	4.6	1.1
15	.02	3.4	2.9	14	30	35	45	20	7.5	4.2	3.6	.98
16	.02	2.8	3.0	28	25	40	45	20	7.7	3.9	3.2	.89
17	.04	2.6	17	22	24	70	45	20	8.4	3.4	3.1	.92
18	.05	2.5	101	69	22	65	45	20	9.5	3.2	3.0	.93
19	.05	2.3	121	74	21	150	40	21	9.7	3.4	3.6	.93
20	.06	2.3	42	32	21	120	40	25	9.0	17	4.7	.92
21	.09	2.9	21	25	77	250	40	23	8.4	10	3.8	.98
22	.09	5.4	16	21	119	170	37	20	7.7	7.1	3.0	1.1
23	.07	3.7	13	19	127	100	35	19	7.4	6.0	2.5	1.0
24	.08	6.6	11	18	82	80	34	19	7.2	5.3	2.1	1.2
25	.20	7.3	9.7	18	54	70	33	18	7.0	4.8	1.9	1.3
26	.32	5.9	8.7	21	46	65	32	18	6.6	4.4	1.9	1.2
27	.37	4.4	8.1	16	42	250	32	18	6.1	4.4	1.9	1.1
28	.34	3.6	7.9	16	37	1350	32	18	5.6	4.1	2.2	1.2
29	.34	3.2	7.8	19	---	350	31	17	5.3	3.7	2.4	1.5
30	.42	3.1	7.5	16	---	250	31	17	5.0	3.5	2.3	1.6
31	.62	---	7.0	186	---	150	---	16	---	3.2	2.2	---
TOTAL	3.84	92.24	447.4	994.6	1636	4386	1677	730	305.4	159.0	90.6	39.65
MEAN	.12	3.07	14.4	32.1	58.4	141	55.9	23.5	10.2	5.13	2.92	1.32
MAX	.62	9.3	121	186	271	1350	130	35	17	17	5.0	2.3
MIN	.02	.61	2.7	6.0	21	28	31	16	5.0	3.2	1.9	.89
AC-FT	7.6	183	887	1970	3250	8700	3330	1450	606	315	180	79

CAL YR 1978 TOTAL 15350.69 MEAN 42.1 MAX 1540 MIN 0 AC-FT 30450
WTR YR 1979 TOTAL 10561.73 MEAN 28.9 MAX 1350 MIN .02 AC-FT 20950

11027000 GUEJITO CREEK NEAR SAN PASQUAL, CA

LOCATION.--Lat 33°06'57", long 116°57'08", in NW¼NW¼SE¼ sec.23, T.12 S., R.1 W., San Diego County, Hydrologic Unit 18070304, on left bank 0.3 mi (0.5 km) upstream from Rockwood Canyon Creek, and 1.8 mi (2.9 km) north of San Pasqual.

DRAINAGE AREA.--22.5 mi² (58.3 km²).

PERIOD OF RECORD.--December 1946 to current year.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 560 ft (171 m), from topographic map.

REMARKS.--Records good. No regulation above station. Diversion for irrigation 0.2 mi (0.3 km) upstream.

AVERAGE DISCHARGE.--32 years (water years 1948-79), 1.97 ft³/s (0.056 m³/s), 1,430 acre-ft/yr (1.76 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,920 ft³/s (82.7 m³/s) Dec. 6, 1966, gage height, 6.78 ft (2.067 m) from rating curve extended above 440 ft³/s (12.5 m³/s) on basis of slope-area measurements at gage heights 5.83 ft (1.777 m) and 6.30 ft (1.920 m); no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*), from rating curve extended above 175 ft³/s (4.96 m³/s) on basis of slope-area measurements at 7.45 ft (2.271 m) and 5.83 ft (1.777 m):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 6	0600	524	14.8	4.19	1.277	Mar. 1	1845	276	7.82	3.60	1.097
Jan. 31	1645	115	3.26	3.01	0.917	Mar. 21	0915	625	17.7	4.39	1.338
Feb. 23	1045	155	4.39	3.18	0.969	Mar. 28	0100	*1,020	28.9	5.00	1.524

Minimum daily discharge, 0.30 ft³/s (0.008 m³/s) Oct. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.68	.44	1.6	1.9	67	86	32	12	5.4	1.8	1.2	1.4
2	.68	.44	2.0	1.6	56	40	28	12	5.0	1.9	1.2	1.3
3	.67	.43	1.5	1.8	30	20	25	12	4.9	2.0	1.3	1.1
4	.67	.38	1.3	1.9	20	18	23	11	5.8	2.0	1.3	1.1
5	.72	.38	1.5	4.3	18	17	20	11	4.9	2.0	1.3	1.0
6	.72	.37	1.8	118	17	15	19	11	4.7	1.9	1.3	1.1
7	.67	.32	1.5	13	16	13	18	11	4.8	1.8	1.2	1.0
8	.59	.49	1.3	8.6	14	13	17	11	5.1	1.8	1.2	1.0
9	.56	.48	1.3	7.3	12	12	17	11	3.8	1.7	1.1	.97
10	.52	.62	1.5	6.5	12	11	19	11	3.3	1.6	1.1	.97
11	.52	3.7	1.4	5.5	12	11	17	10	3.1	1.6	1.2	.92
12	.52	6.5	1.4	5.5	11	10	17	9.3	3.0	1.7	1.7	.92
13	.42	2.1	1.4	4.8	10	10	16	8.8	2.8	1.8	2.0	.92
14	.40	3.6	1.4	8.9	13	10	15	8.4	2.7	1.7	1.9	.86
15	.39	2.0	1.5	15	11	9.6	14	8.2	2.6	1.7	1.6	.72
16	.53	1.7	1.5	20	10	9.8	14	8.2	2.8	1.6	1.5	.64
17	.66	1.6	9.0	16	9.7	21	14	8.1	3.1	1.4	1.4	.69
18	.76	1.6	20	35	9.0	18	14	8.0	3.4	1.4	1.4	.69
19	.69	1.5	17	19	8.8	51	13	8.0	3.2	1.4	1.6	.69
20	.87	1.5	8.4	15	8.8	36	13	8.0	3.0	2.1	2.6	.75
21	.99	2.1	4.8	14	30	130	13	8.3	2.8	3.1	2.2	1.1
22	.89	4.7	3.7	14	29	34	13	8.0	2.8	1.9	1.8	.94
23	.74	1.8	3.2	13	55	26	12	7.2	2.7	1.7	1.5	.92
24	.62	3.7	2.8	13	22	21	12	8.9	2.7	1.6	1.3	1.5
25	.73	2.8	2.6	14	16	19	12	4.9	2.6	1.5	1.2	1.0
26	.46	1.8	2.5	14	14	17	12	4.8	2.4	1.4	1.2	.94
27	.34	1.6	2.4	13	13	100	12	4.9	2.2	1.4	1.2	.89
28	.30	1.4	2.4	14	13	400	12	5.0	2.0	1.4	1.3	.92
29	.31	1.4	2.4	14	---	91	12	5.0	1.9	1.3	1.4	1.0
30	.36	1.4	2.3	13	---	60	11	4.8	2.4	1.3	1.4	1.1
31	.40	---	2.1	56	---	38	---	4.9	---	1.3	1.2	---
TOTAL	18.46	52.85	109.5	501.6	565.3	1348.4	486	264.7	101.9	52.8	44.8	29.05
MEAN	.60	1.76	3.53	16.2	20.2	43.5	16.2	8.54	3.40	1.70	1.45	.97
MAX	.99	6.5	20	118	67	400	32	12	5.8	3.1	2.6	1.5
MIN	.30	.32	1.3	1.6	8.8	9.6	11	4.8	1.9	1.3	1.1	.64
AC-FT	37	105	217	995	1120	2670	964	525	202	105	89	58

CAL YR 1978 TOTAL 5026.98 MEAN 13.8 MAX 620 MIN .02 AC-FT 9970
WTR YR 1979 TOTAL 3575.36 MEAN 9.80 MAX 400 MIN .30 AC-FT 7090

11028500 SANTA MARIA CREEK NEAR RAMONA, CA

LOCATION.--Lat 33°03'08", long 116°56'41", in SE¼SE¼SE¼ sec.11, T.13 S., R.1 W., San Diego County, Hydrologic Unit 18070304, on left bank 3.8 mi (6.1 km) northwest of Ramona, and 4.6 mi (7.4 km) upstream from mouth.

DRAINAGE AREA.--57.6 mi² (149.2 km²).

PERIOD OF RECORD.--November 1912 to September 1920, October 1946 to current year.

GAGE.--Water-stage recorder. Concrete control since October 1946. Datum of gage is 1,294.44 ft (394.545 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1946, at datum 1.78 ft (0.543 m) lower.

REMARKS.--Records fair. No regulation above station.

AVERAGE DISCHARGE.--40 years (water years 1914-20, 1947-79) 4.24 ft³/s (0.120 m³/s), 3,072 acre-ft/yr (3.79 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,140 ft³/s (202 m³/s) Jan. 27, 1916, gage height, 14.1 ft (4.298 m), from floodmarks, present datum, from rating curve extended above 600 ft³/s (17.0 m³/s) on basis of slope-area measurement of maximum flow; no flow for several months in each year.

EXTREME FOR CURRENT YEAR.--Peak discharges above base of 250 ft³/s (7.08 m³/s) revised, and maximum (*), from rating curve extended above 130 ft³/s (3.68 m³/s) on basis of slope-area measurements at gage heights 4.56 ft (1.390 m) and 14.39 ft (4.386):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 6	0700	746	21.1	3.73	1.137	Mar. 1	1830	412	11.7	3.03	0.924
Jan. 31	1800	*1,030	29.2	4.29	1.308	Mar. 28	1430	979	27.7	4.20	1.280

Minimum daily discharge, no flow Oct. 3, 4, 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.06	.03	1.4	293	170	73	10	2.2	.10	.04	.35
2	.02	.05	.06	1.8	166	167	58	12	4.4	.10	.04	.23
3	0	.04	.05	2.3	116	67	45	11	3.1	.10	.04	.23
4	0	.03	.05	2.7	69	48	38	9.5	3.5	.15	.04	.09
5	.02	.04	.05	23	48	40	34	8.9	3.3	.31	.04	.03
6	.02	.04	.01	290	35	31	31	9.1	2.8	.38	.04	.04
7	.02	.04	.02	55	26	26	29	9.4	2.6	.08	.04	.04
8	.02	.04	.04	25	24	24	28	9.9	2.9	.13	.04	.04
9	0	.05	.06	28	21	23	30	9.6	1.9	.11	.04	.04
10	0	.06	.05	24	20	20	36	8.1	1.5	.23	.04	.13
11	.02	.09	.05	17	19	17	29	6.5	1.4	.22	.06	.30
12	.02	.08	.06	15	18	18	26	5.6	.90	.15	.22	.12
13	.04	.05	.06	13	18	17	23	5.1	.80	.06	.26	.12
14	.01	.05	.06	12	40	18	22	4.6	.65	.06	.23	.14
15	.02	.05	.08	27	30	18	20	2.8	.50	.07	.20	.10
16	.01	.05	.09	83	23	23	18	2.3	.45	.08	.10	.10
17	.02	.04	2.9	60	20	69	17	1.9	.40	.07	.04	.09
18	.02	.04	78	136	19	57	16	2.3	.35	.08	.10	.10
19	.04	.04	79	91	19	120	14	2.1	.30	.07	.20	.10
20	.02	.04	17	38	19	144	13	5.4	.30	.12	.23	.12
21	.03	.06	4.9	27	107	156	13	5.9	.25	.07	.20	.12
22	.06	.06	3.3	21	158	97	13	5.5	.25	.06	.10	.13
23	.02	.05	3.1	18	121	57	13	5.0	.20	.05	.03	.15
24	.03	.07	2.9	17	79	45	12	4.7	.20	.05	.03	.18
25	.04	.05	2.7	20	47	41	12	3.3	.15	.05	.04	.17
26	.02	.05	2.3	21	39	37	11	1.7	.15	.05	.05	.28
27	.02	.02	2.2	14	35	78	11	2.1	.10	.05	.04	.16
28	.02	.02	2.1	17	31	676	11	3.3	.08	.05	.06	.17
29	.04	.02	2.1	19	---	243	11	3.7	.09	.04	.06	.17
30	.03	.02	1.9	14	---	128	10	3.7	.09	.04	.05	.17
31	.09	---	2.2	493	---	91	---	2.4	---	.04	.25	---
TOTAL	.68	1.40	285.42	1626.2	1660	2768	717	177.6	35.81	3.22	2.95	4.21
MEAN	.022	.047	6.63	52.5	59.3	89.3	23.9	5.73	1.19	.10	.095	.14
MAX	.09	.09	79	493	293	676	73	12	4.4	.38	.26	.35
MIN	0	.02	.01	1.4	18	17	10	1.7	.08	.04	.03	.03
AC-FT	1.3	2.8	407	3230	3290	5490	1420	352	71	6.4	5.9	8.4

CAL YR 1978 TOTAL 12858.70 MEAN 35.2 MAX 1280 MIN 0 AC-FT 25510
WTR YR 1979 TOTAL 7202.49 MEAN 19.7 MAX 676 MIN 0 AC-FT 14290

11030020 LAKE HODGES NEAR ESCONDIDO, CA

LOCATION.--Lat 33°02'41", long 117°07'39", in SE¼SE¼NW¼ sec.18, T.13 S., R.2 W., San Diego County, Hydrologic Unit 18070304, 20 ft (6 m) upstream from right upstream end of Hodges Dam on San Dieguito River, 6.4 mi (10.3 km) southwest of Escondido, and 20 mi (32 km) southwest of Sutherland Reservoir.

DRAINAGE AREA.--303 mi² (785 km²).

PERIOD OF RECORD.--October 1945 to September 1968 (published with San Dieguito River at Lake Hodges, station 11030000), October 1972 to current year. Records of monthend gage heights February 1919 to September 1945, in files of San Diego County Department of Sanitation and Flood Control.

GAGE.--Nonrecording gage. Datum of gage is 200.0 ft (60.96 m) National Geodetic Vertical Datum of 1929 (levels by county of San Diego); gage readings have been reduced to elevations NGVD. Prior to Oct. 1, 1972, nonrecording gage at site 800 ft (244 m) upstream on right bank at same datum. October 1972 to current year, supplementary water-stage recorder used for flood warning only on left upstream face of dam at same datum.

REMARKS.--Reservoir is formed by multiple-arch reinforced concrete dam, constructed in 1917-19. Storage began in February 1919. Capacity table based on a 1948 survey; table dated Sept. 18, 1951. Capacity of reservoir at spillway level, 33,550 acre-ft (41.4 hm³), elevation, 315.0 ft (96.01 m). Dead storage below lowest outlet, 1,160 acre-ft (1.43 hm³), elevation, 254.0 ft (77.42 m) included in these records. Reservoir can be drawn down to 207 acre-ft (255,000 m³), elevation, 240.0 ft (73.15 m) by pumping. Water drawn from Lake Hodges passes through a conduit to San Dieguito re-regulating reservoir, from which it is released as required for municipal use. Flow regulated since July 1954 by Sutherland Reservoir (station 11024000). Diversions for irrigation above Lake Hodges.

COOPERATION.--Gage heights were furnished by city of San Diego, Utilities Engineering Division.

EXTREMES FOR PERIOD OF RECORD (1945-68 AND SINCE 1972).--Maximum contents, 37,930 acre-ft (46.8 hm³) Apr. 1, 1946, elevation, 315.30 ft (96.103 m); minimum, 114 acre-ft (141,000 m³) Oct. 31, 1965, elevation, 235.80 ft (71.872 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 35,180 acre-ft (43.4 hm³), spilling, Mar. 29, elevation, 316.30 ft (96.408 m); minimum observed, 29,540 acre-ft (36.4 hm³) Nov. 10, elevation, 311.60 ft (94.976 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	312.28	30,310	--
Oct. 31	311.72	29,680	-630
Nov. 30	312.07	30,070	+390
Dec. 31	313.20	31,380	+1,310
CAL YR 1978	--	--	+26,230
Jan. 31	315.44	34,100	+2,720
Feb. 28	315.44	34,100	0
Mar. 31	315.68	34,400	300
Apr. 30	315.32	33,950	-450
May 31	315.20	33,800	-150
June 30	314.55	32,980	-820
July 31	313.43	31,650	-1,330
Aug. 31	312.58	30,660	-990
Sept. 30	311.85	29,830	-830
WTR YR 1979	--	--	-480

11030700 LAKE WOHLFORD NEAR ESCONDIDO, CA

LOCATION.--Lat 33°10'00", long 117°00'14", in NW¼NE¼ sec.5, T.12 S., R.1 W., San Diego County, Hydrologic Unit 18070303, on face of Lake Wohlford Dam, 330 ft (100 m) left of spillway, 3.9 mi (6.3 km) southeast of Valley Center Post Office, and 5.7 mi (9.2 km) northeast of Escondido.

DRAINAGE AREA.--7.96 mi^2 (20.62 km^2).

PERIOD OF RECORD.--October 1972 to current year. October 1933 to September 1972 in files of San Diego County Department of Sanitation and Flood Control.

GAGE.--Nonrecording gage. Datum of gage is 1,385.0 ft (422.15 m) National Geodetic Vertical Datum of 1929 (levels by city of Escondido Engineering Department); gage readings have been reduced to NGVD. Since October 1972, supplementary water-stage recorder for flood warning only, at same site at datum 15.0 ft (4.57 m) higher.

REMARKS.--Reservoir is formed by earthfill dam riprapped upstream and downstream, with concrete spillway anchored to natural rock. Dam was completed in 1932. Capacity table dated March 1955. Capacity at spillway level, 6,940 acre-ft (8.56 hm^3), elevation, 1,480.0 ft (451.10 m). Dead storage below lowest outlet, 131 acre-ft (162,000 m^3), elevation, 1,420.0 ft (432.82 m). Reservoir storage includes supplemental water diverted from the San Luis Rey River via Escondido Mutual Water Co.'s canal to Lake Wohlford Reservoir. Stored water is released for municipal use by Vista Irrigation District and city of Escondido.

COOPERATION.--Gage heights were furnished by Escondido Mutual Water Company.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 6,940 acre-ft (8.56 hm^3) May 1-9, 1952, elevation, 1,480.0 ft (451.10 m); minimum, 809 acre-ft (997,000 m^3) Dec. 1, 1953, elevation, 1,437.0 ft (438.00 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 6,840 acre-ft (8.43 hm^3) June 9, elevation, 1,479.5 ft (450.95 m); minimum observed, 1,370 acre-ft (1.69 hm^3) Dec. 10, elevation, 1,444.6 ft (440.31 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0700, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30....................	1,465.4	4,090	--
Oct. 31....................	1,452.3	2,170	-1,920
Nov. 30....................	1,447.1	1,600	-570
Dec. 31....................	1,447.2	1,610	+10
CAL YR 1978................	--	--	+480
Jan. 31....................	1,456.9	2,770	+1,160
Feb. 28....................	1,466.9	4,350	+1,580
Mar. 31....................	1,474.8	5,840	+1,490
Apr. 30....................	1,474.9	5,860	+20
May 31....................	1,479.2	6,770	+910
June 30....................	1,479.9	6,490	-280
July 31....................	1,473.5	5,580	-910
Aug. 31....................	1,470.2	4,950	-630
Sept. 30....................	1,464.1	3,860	-1,090
WTR YR 1979................	--	--	-230

11031500 AGUA CALIENTE CREEK NEAR WARNER SPRINGS, CA

LOCATION.--Lat 33°17'19", long 116°39'11", in San Jose del Valle Grant, San Diego County, Hydrologic Unit 18070303, on downstream end of right pier of bridge on State Highway 79, 1.2 mi (1.9 km) upstream from Canada Verde Creek, and 1.2 mi (1.9 km) northwest of Warner Springs.

DRAINAGE AREA.--19.0 mi^2 (49.2 km^2).

PERIOD OF RECORD.--February 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,950 ft (899 m), from topographic map. Prior to Jan. 29, 1966, at site 120 ft (37 m) upstream at same datum, used as supplementary gage since Dec. 12, 1968.

REMARKS.--Records poor. No regulation or diversion above station.

AVERAGE DISCHARGE.--18 years, 1.62 ft^3/s (0.046 m^3/s), 1,170 acre-ft/yr (1.44 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,200 ft^3/s (34.0 m^3/s) Dec. 6, 1966, gage height, 5.18 ft (1.579 m), from rating curve extended above 240 ft^3/s (6.80 m^3/s); no flow for much of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft^3/s (1.42 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 18	1930	72	2.04	2.23	0.680	Mar. 28	1100	*183	5.18	2.67	0.814
Feb. 21	1000	94	2.66	2.54	0.774						

Minimum daily discharge, 0.01 ft^3/s (<0.001 m^3/s) many days during October and November.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.01	.06	.17	18	13	37	6.9	2.2	.56	.23	.18
2	.04	.01	.06	.15	15	16	31	6.7	2.1	.54	.23	.18
3	.02	.01	.06	.14	12	16	26	6.5	2.0	.52	.22	.18
4	.01	.01	.04	.13	11	14	23	6.3	1.9	.50	.22	.18
5	.01	.01	.04	.12	10	13	20	6.1	1.9	.48	.22	.18
6	.01	.01	.03	17	12	12	18	5.9	1.8	.47	.21	.18
7	.01	.01	.02	6.7	17	12	16	5.7	1.7	.45	.21	.17
8	.01	.01	.02	3.1	18	12	15	5.5	1.7	.43	.21	.17
9	.01	.01	.02	2.2	18	11	14	5.4	1.6	.42	.20	.17
10	.01	.01	.02	1.7	18	11	14	5.2	1.5	.41	.20	.17
11	.01	.01	.02	1.1	17	10	13	5.0	1.5	.39	.20	.17
12	.01	.02	.02	1.1	15	9.4	13	4.8	1.4	.38	.20	.17
13	.01	.01	.02	.85	14	9.4	12	4.6	1.3	.37	.19	.17
14	.01	.02	.02	.71	21	9.4	12	4.4	1.3	.36	.19	.17
15	.01	.01	.02	.99	16	8.7	12	4.2	1.2	.34	.19	.17
16	.01	.01	.02	5.6	12	8.7	11	4.1	1.1	.33	.19	.17
17	.01	.01	2.7	11	10	9.4	11	3.9	1.1	.32	.19	.17
18	.01	.01	26	16	9.4	11	10	3.8	1.0	.32	.19	.17
19	.01	.01	12	11	9.4	13	10	3.6	.97	.31	.19	.17
20	.01	.01	3.4	7.4	9.4	17	9.8	3.5	.93	.30	.18	.17
21	.01	.01	2.2	6.3	40	21	9.5	3.3	.88	.29	.18	.17
22	.01	.02	1.5	5.8	26	19	9.2	3.2	.84	.28	.18	.17
23	.01	.01	1.3	5.4	19	16	9.0	3.1	.80	.28	.18	.16
24	.01	2.4	.85	5.1	16	14	8.7	3.0	.76	.27	.18	.16
25	.01	1.3	.58	4.9	13	13	8.4	2.9	.73	.26	.18	.16
26	.01	.08	.48	4.7	12	13	8.2	2.8	.70	.26	.18	.16
27	.01	.06	.32	4.5	11	28	7.9	2.7	.67	.25	.18	.16
28	.01	.08	.28	4.3	10	120	7.6	2.6	.64	.25	.18	.16
29	.01	.08	.24	4.2	---	80	7.4	2.5	.61	.24	.18	.16
30	.01	.06	.22	3.8	---	59	7.2	2.4	.59	.24	.18	.16
31	.01	---	.19	11	---	48	---	2.3	---	.23	.18	---
TOTAL	.38	4.32	52.75	147.16	429.2	667.0	410.9	132.9	37.42	11.05	6.04	5.08
MEAN	.012	.14	1.70	4.75	15.3	21.5	13.7	4.29	1.25	.36	.19	.17
MAX	.04	2.4	26	17	40	120	37	6.9	2.2	.56	.23	.18
MIN	.01	.01	.02	.12	9.4	8.7	7.2	2.3	.59	.23	.18	.16
AC-FT	.8	8.6	105	292	851	1320	815	264	74	22	12	10

CAL YR 1978 TOTAL 3221.35 MEAN 8.83 MAX 355 MIN 0 AC-FT 6390
WTR YR 1979 TOTAL 1904.28 MEAN 5.22 MAX 120 MIN .01 AC-FT 3780

11033000 WEST FORK SAN LUIS REY RIVER NEAR WARNER SPRINGS, CA

LOCATION.--Lat 33°17'48", long 116°45'52", in San Jose del Valle Grant, San Diego County, Hydrologic Unit 18070303, on left bank 0.2 mi (0.3 km) upstream from Fink Road, 2.6 mi (4.2 km) upstream from mouth, and 7.5 mi (12.1 km) west of Warner Springs.

DRAINAGE AREA.--25.5 mi² (66.0 km²).

PERIOD OF RECORD.--January 1913 to November 1915, October 1956 to current year. Low-flow records not equivalent prior to Nov. 5, 1971, due to undetermined amount of underflow between sites.

REVISED RECORDS.--WDR CA-74: 1973(P).

GAGE.--Water-stage recorder. Altitude of gage is 2,800 ft (853 m), from topographic map. Prior to Oct. 1, 1956, at different datum. Prior to Nov. 5, 1971, at site 500 ft (150 m) downstream at same datum.

REMARKS.--Records fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--24 years (water years 1914-15, 1957-79), 8.35 ft³/s (0.236 m³/s), 6,050 acre-ft/yr (7.46 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,200 ft³/s (119 m³/s) Dec. 6, 1966, gage height, 11.87 ft (3.618 m), from rating curve extended above 250 ft³/s (7.08 m³/s) on basis of slope-area measurement of maximum flow, maximum gage height, 14.35 ft (4.374 m) Mar. 4, 1978; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximum(*), from rating curve extended above 130 ft³/s (3.68 m³/s):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 18	1630	311	8.81	11.84	3.609	Feb. 21	0700	696	19.7	12.57	3.831
Jan. 6	0600	499	14.1	12.24	3.731	Mar. 28	0100	*930	26.3	12.89	3.929

Minimum daily discharge, 0.03 ft³/s (<0.001 m³/s) several days in October and November.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.03	4.4	18	42	97	98	19	6.1	1.6	.41	.38
2	.11	.03	26	14	46	82	82	27	6.9	1.5	.41	.37
3	.08	.03	12	16	37	66	73	29	6.9	1.4	.41	.36
4	.08	.03	9.3	16	35	57	65	18	6.5	1.3	.40	.36
5	.07	.04	7.0	40	34	51	60	18	7.6	1.3	.40	.35
6	.07	.04	6.3	221	35	47	57	17	6.8	1.2	.40	.35
7	.06	.03	6.1	48	39	46	56	18	6.5	1.2	.40	.34
8	.06	.04	7.0	38	42	44	52	19	7.2	1.1	.40	.34
9	.05	.03	6.0	24	42	41	59	18	6.9	1.1	.40	.34
10	.04	.03	7.0	21	41	38	48	18	5.4	1.0	.40	.33
11	.04	.04	8.1	18	41	36	37	15	5.2	1.0	.40	.33
12	.04	1.5	8.1	18	41	34	38	14	4.9	.96	.40	.32
13	.04	3.7	7.9	16	41	39	37	12	4.6	.91	.40	.32
14	.04	10	6.0	15	110	37	31	12	4.3	.87	.40	.32
15	.04	12	6.0	38	58	33	29	11	4.0	.84	.40	.32
16	.04	17	7.0	55	44	35	29	11	3.8	.80	2.3	.32
17	.04	10	78	53	39	46	27	10	3.5	.77	11	.31
18	.04	7.5	147	66	38	47	28	9.6	3.3	.76	5.1	.31
19	.04	6.5	84	42	38	61	26	9.6	3.1	3.0	7.2	.31
20	.04	6.0	28	41	38	66	25	9.6	2.9	9.3	2.9	.31
21	.04	9.1	8.1	29	227	95	24	9.4	2.8	7.2	1.8	.31
22	.04	32	5.2	25	131	82	23	9.3	2.6	5.6	1.3	.31
23	.04	6.0	4.8	22	112	66	22	8.9	2.5	3.0	.93	.31
24	.04	29	6.4	22	79	57	22	8.9	2.3	1.9	.62	.30
25	.04	10	6.8	20	61	53	21	8.4	2.2	1.1	.59	.30
26	.03	4.6	6.5	22	96	49	21	8.9	2.1	.70	.45	.30
27	.03	2.3	3.7	19	90	396	21	8.9	1.9	.56	.45	.30
28	.13	2.1	3.1	22	66	626	20	8.4	1.8	.58	.45	.30
29	.03	2.3	6.0	18	---	230	20	8.4	1.8	.48	.41	.30
30	.03	2.5	11	15	---	190	19	8.4	1.7	.45	.40	.30
31	.03	---	19	15	---	115	---	7.6	---	.43	.39	---
TOTAL	1.51	175.79	528.2	1027	1651	2847	1151	397.8	126.9	54.11	42.23	9.72
MEAN	.049	5.86	17.0	33.1	59.0	91.8	38.4	12.8	4.23	1.75	1.36	.32
MAX	.11	32	147	221	227	626	98	29	7.6	9.3	11	.38
MIN	.03	.03	3.1	14	34	33	19	7.6	1.7	.43	.39	.30
AC-FT	3.0	349	1050	2040	3270	5650	2280	789	252	107	84	19

CAL YR 1978 TOTAL 13625.70 MEAN 37.3 MAX 808 MIN .02 AC-FT 27030
WTR YR 1979 TOTAL 8012.26 MEAN 22.0 MAX 626 MIN .03 AC-FT 15890

11037700 PAUMA CREEK NEAR PAUMA VALLEY, CA

LOCATION.--Lat 33°20'10", long 116°58'25", in Pauma Grant, San Diego County, Hydrologic Unit 18070303, on right bank 0.3 mi (0.5 km) downstream from unnamed tributary, and 2.2 mi (3.5 km) north of Pauma Valley.

DRAINAGE AREA.--11.0 mi² (28.5 km²).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder on creek; water-stage recorder and Parshall flume on diversion. Altitude of creek gage is 1,240 ft (378 m), from topographic map. Diversion gage is at different datum.

REMARKS.--Records fair. No regulation above station. Pauma Valley Water Co. diverts from a site 0.2 mi (0.3 km) upstream. For records of combined discharge of Pauma Creek and Pauma Valley Water Co.'s diversion, see following page.

AVERAGE DISCHARGE.--Creek only: 15 years, 4.27 ft³/s (0.121 m³/s), 3,090 acre-ft/yr (3.81 hm³/yr).
Combined creek and diversion: 15 years, 4.93 ft³/s (0.140 m³/s), 3,570 acre-ft/yr (4.40 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 2,100 ft³/s (59.5 m³/s) Dec. 6, 1966, gage height, 8.60 ft (2.621 m), from rating curve extended above 110 ft³/s (3.12 m³/s) on basis of slope-area measurement at gage height 6.12 ft (1.865 m); no flow much of each year.
Combined creek and diversion: Maximum discharge, 2,100 ft³/s (59.5 m³/s) Dec. 6, 1966; minimum daily, 0.04 ft³/s (0.001 m³/s) July 29 to Aug. 2, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.42 m³/s) and maximum (*), from rating curve extended above 250 ft³/s (7.08 m³/s) on basis of slope-area measurements at gage heights 5.28 ft (1.609 m) and 7.80 ft (2.377 m):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 18	0300	53.0	1.50	3.12	0.951	Feb. 21	0715	190	5.38	4.05	1.234
Jan. 6	0500	101	2.86	3.55	1.082	Mar. 22	Unknown	Unknown		Unknown	
Feb. 14	1000	78.0	2.21	3.37	1.027	Mar. 28	Unknown	*700†	19.8	5.49	1.673

†Estimated.

Minimum daily discharge, 0.11 ft³/s (0.003 m³/s) Sept. 11-13.

Combined creek and diversion: Maximum discharge, 700 ft³/s (19.8 m³/s) Mar. 28, estimated; minimum daily, 0.56 ft³/s (0.016 m³/s) Sept. 11-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	.40	2.4	3.0	18	30	70	11	5.0	1.5	.84	.40
2	.23	.42	2.6	3.0	19	85	55	12	4.9	1.6	.66	.33
3	.24	.46	3.2	3.0	13	36	43	12	4.8	1.7	.62	.26
4	.25	.44	2.6	3.3	11	36	41	11	5.0	1.7	.68	.23
5	.24	.34	2.4	7.0	11	36	35	10	4.7	1.6	.66	.21
6	.22	.33	2.7	56	10	85	33	9.9	4.3	1.6	.77	.19
7	.24	.29	2.7	30	10	36	31	9.9	4.4	1.5	.73	.16
8	.21	.66	2.6	13	11	34	29	9.9	4.3	1.6	.68	.15
9	.22	.31	2.5	12	11	32	27	9.9	3.7	1.3	.64	.13
10	.22	.66	2.5	11	12	28	26	9.7	3.4	1.5	.60	.12
11	.24	4.1	2.0	9.1	13	28	24	9.0	3.1	1.3	.50	.11
12	.23	4.2	2.4	8.5	13	19	23	8.6	3.0	1.3	.68	.11
13	.21	3.6	2.0	7.4	16	21	21	7.7	2.8	1.2	1.1	.11
14	.20	3.5	2.0	6.4	44	19	20	7.6	2.6	1.2	1.0	.17
15	.17	3.1	2.3	11	20	17	19	7.4	2.6	1.1	.65	.21
16	.20	2.8	2.6	19	19	18	18	7.7	2.5	1.6	.78	.22
17	.25	2.7	17	19	17	19	18	7.6	2.7	1.1	.87	.23
18	.30	2.5	34	21	17	30	17	7.2	3.1	.98	.88	.27
19	.30	2.3	21	16	16	36	16	7.0	3.0	1.0	.97	.25
20	.32	2.3	17	14	15	32	16	7.4	2.7	3.0	1.1	.23
21	.70	2.0	4.5	14	68	40	15	7.0	2.6	2.4	.93	.24
22	.78	5.0	7.0	11	35	200	14	6.8	2.6	1.0	.73	.20
23	.62	3.2	4.2	9.3	28	150	14	6.2	2.3	1.5	.62	.26
24	.55	4.4	4.9	9.8	23	48	14	6.0	2.2	1.3	.52	.27
25	.58	4.9	4.4	9.6	26	65	13	5.9	2.1	1.1	.44	.38
26	.57	3.7	4.0	8.7	23	40	13	5.7	1.9	1.0	.39	.25
27	.45	3.2	4.0	7.6	21	80	12	5.7	1.7	.90	.35	.22
28	.35	4.2	4.0	6.8	21	300	12	5.7	1.9	.78	.34	.22
29	.29	5.6	4.7	7.3	---	200	12	5.7	1.9	.70	.35	.20
30	.29	3.7	4.1	8.5	---	150	11	5.5	1.9	.60	.37	.36
31	.26	---	3.3	14	---	65	---	5.2	---	.80	.43	---
TOTAL	10.17	82.15	189.1	358.5	557	1930	711	248.3	92.1	41.93	21.23	6.73
MEAN	.33	2.74	6.10	11.6	19.9	62.3	23.7	8.01	3.07	1.35	.68	.22
MAX	.78	6.2	34	56	68	300	70	12	5.0	3.0	1.1	.40
MIN	.17	.29	2.0	3.0	10	17	11	5.2	1.5	.60	.34	.11
AC-FT	20	163	375	711	1100	3830	1410	493	183	83	42	13

CAL YR 1978 TOTAL 5623.29 MEAN 15.4 MAX 720 MIN .08 AC-FT 11150
WTR YR 1979 TOTAL 4157.21 MEAN 11.4 MAX 300 MIN .11 AC-FT 8250

11037700 PAUMA CREEK NEAR PAUMA VALLEY, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF PAUMA CREEK AND PAUMA VALLEY WATER CO.'S DIVERSION NEAR PAUMA VALLEY, CA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.68	.95	2.8	4.6	19	30	71	12	4.3	2.5	1.3	.82
2	.75	.97	3.2	3.6	16	25	56	13	4.2	2.4	1.3	.92
3	.72	.95	3.6	3.5	16	26	46	13	4.1	2.7	1.2	.73
4	.73	.93	3.0	3.8	12	28	41	12	4.3	2.7	1.3	.89
5	.72	.88	2.8	7.4	12	26	36	11	4.8	2.6	1.3	.67
6	.69	.85	3.1	56	11	25	34	11	5.6	2.6	1.4	.85
7	.67	.79	3.1	20	11	24	32	11	5.7	2.4	1.3	.84
8	.67	.76	2.8	13	12	24	30	11	5.6	2.3	1.3	.81
9	.66	.78	2.9	12	12	27	28	11	5.0	2.2	1.2	.58
10	.67	1.3	2.9	11	13	30	25	11	4.7	2.2	1.2	.57
11	.69	4.3	2.8	9.3	16	20	25	10	4.6	2.2	1.2	.56
12	.68	4.4	2.8	8.7	16	19	24	9.7	4.3	2.2	1.4	.56
13	.66	3.8	2.8	8.8	15	21	22	9.4	4.1	2.1	1.4	.56
14	.66	3.4	2.8	7.8	44	19	21	8.7	3.9	2.1	1.5	.62
15	.61	3.4	2.7	11	26	17	20	8.7	3.7	1.9	1.4	.65
16	.65	3.1	2.8	10	14	18	19	9.4	3.4	2.2	1.3	.66
17	.71	3.1	17	19	17	19	19	8.9	4.0	2.1	1.4	.67
18	.76	2.9	38	71	17	20	18	8.5	4.3	2.0	1.4	.71
19	.78	2.7	61	16	16	26	17	8.3	4.2	1.9	1.5	.69
20	.79	2.7	12	14	15	22	17	9.9	3.9	4.8	1.6	.67
21	1.2	3.7	4.9	16	68	45	16	8.9	3.8	3.1	1.4	.68
22	1.2	4.1	7.4	12	36	208	15	8.1	3.6	2.5	1.2	.69
23	1.1	3.5	6.6	10	28	130	15	7.5	3.5	2.2	1.1	.69
24	.96	5.2	4.3	9.7	23	88	15	7.3	3.3	2.0	1.0	.72
25	1.1	4.3	5.8	10	26	68	14	7.2	3.2	1.6	.95	.73
26	1.1	4.1	5.3	9.3	23	48	14	7.0	3.0	1.7	.88	.67
27	.93	3.7	5.2	8.8	21	88	13	7.0	2.8	1.6	.86	.66
28	.83	4.5	5.2	8.8	21	300	13	7.8	2.6	1.6	.82	.64
29	.76	3.6	5.1	7.9	---	290	13	7.0	2.6	1.3	.83	.69
30	.68	3.8	6.7	7.1	---	190	12	6.0	2.6	1.3	.85	.73
31	.95	---	6.6	15	---	86	---	6.5	---	1.3	.91	---
TOTAL	24.76	93.50	199.0	379.1	571	1831	761	280.8	129.1	68.7	37.80	20.02
MEAN	.80	3.12	6.45	12.2	20.4	59.1	26.7	9.23	4.30	2.20	1.22	.67
MAX	1.2	8.5	38	56	68	300	71	13	6.3	4.6	1.6	.87
MIN	.61	.76	2.7	3.5	11	17	12	6.5	2.6	1.3	.82	.56
AC-FT	49	186	396	752	1130	3630	1470	557	256	136	75	40

CAL YR 1978 TOTAL 5621.75 MEAN 16.0 MAX 209 MIN .58 AC-FT 11150
WTR YR 1979 TOTAL 4381.46 MEAN 12.0 MAX 300 MIN .56 AC-FT 8690

11046000 SAN LUIS REY RIVER AT MONSERATE NARROWS, NEAR PALA, CA

LOCATION.--Lat 33°20'16", long 117°06'07", in SW¼SE¼NW¼ sec.6, T.10 S., R.2 W., San Diego County, Hydrologic Unit 18070303, on left bank 4 mi (6 km) southwest of Pala, 6 mi (10 km) northeast of Bonsall, and 27 mi (43 km) downstream from Lake Henshaw.

DRAINAGE AREA.--373 mi² (966 km²).

PERIOD OF RECORD.--December 1935 to March 1938 (fragmentary), April 1938 to November 1941, October 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 270.82 ft (82.546 m) National Geodetic Vertical Datum of 1929 (levels by State of California). Prior to October 1946, at same site at different datum. Oct. 22, 1946, to Nov. 30, 1954, at datum 1.0 ft (0.30 m) higher.

REMARKS.--Records fair. Flow regulated by Lake Henshaw, capacity, 194,300 acre-ft (240 hm³). Several diversions above station.

AVERAGE DISCHARGE.--36 years (water years 1939-41, 1947-79), 9.94 ft³/s (0.282 m³/s), 7,200 acre-ft/yr (8.88 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge since 1946, 7,000 ft³/s (198 m³/s) Dec. 6, 1966, gage height, 6.70 ft (2.042 m); maximum gage height, 8.7 ft (2.65 m) Feb. 7, 1937, datum then in use, discharge not determined; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,150 ft³/s (60.9 m³/s) Mar. 28, gage height, 6.15 ft (1.875 m); minimum daily, 0.83 ft³/s (0.024 m³/s) Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.1	4.1	6.8	208	123	534	240	19	2.0	1.1	1.4
2	2.2	2.2	4.7	7.3	176	152	400	240	18	2.2	1.4	1.6
3	2.5	2.2	3.5	7.1	138	73	440	236	16	2.0	1.4	1.4
4	2.5	2.3	3.5	6.5	79	67	410	238	16	1.9	1.4	1.4
5	2.1	2.3	3.7	9.5	68	64	380	230	14	1.5	1.4	1.4
6	2.3	2.4	3.9	112	63	61	365	240	13	1.4	1.5	1.6
7	2.3	2.6	3.1	32	62	57	350	244	12	1.4	1.4	1.6
8	2.3	2.8	2.8	18	61	53	360	247	12	1.5	1.4	1.4
9	2.3	3.5	3.3	14	60	58	338	240	8.7	1.4	1.4	1.3
10	2.2	13	3.9	12	90	63	329	240	8.2	1.4	1.4	1.3
11	2.0	70	3.8	7.0	57	61	315	220	6.2	1.3	1.9	1.3
12	1.7	180	4.0	9.9	56	60	308	103	6.1	1.6	2.1	1.3
13	1.6	56	4.3	11	57	61	299	93	5.3	1.5	1.7	1.4
14	1.8	19	4.4	12	94	60	287	87	5.2	1.7	1.9	1.4
15	1.8	12	4.6	34	81	37	272	77	5.3	1.6	1.6	1.6
16	1.9	7.5	4.7	37	61	36	265	66	4.7	1.6	1.6	1.4
17	1.7	6.2	13	39	62	56	263	59	5.2	1.7	1.6	1.6
18	1.8	5.6	23	52	63	60	251	50	5.2	1.4	1.9	1.6
19	1.8	5.2	25	44	64	133	242	48	4.3	1.3	1.7	1.6
20	1.9	5.0	8.2	36	62	93	249	49	4.3	2.6	1.9	1.7
21	2.0	15	6.7	36	154	130	251	44	3.5	3.4	1.3	1.7
22	2.2	150	6.8	32	104	111	245	42	3.8	1.9	1.4	1.6
23	2.2	25	6.7	28	104	86	240	42	3.9	1.9	1.3	1.6
24	2.2	60	6.7	29	122	96	244	41	3.8	1.7	1.3	1.7
25	2.0	70	6.9	31	99	52	238	36	3.7	1.6	1.4	1.6
26	2.1	20	6.6	25	96	60	238	31	2.8	1.4	1.4	.83
27	2.1	9.5	7.1	26	87	106	238	26	2.4	1.2	1.4	.91
28	2.1	5.6	7.2	29	83	1620	241	28	2.3	1.1	1.4	.91
29	2.1	4.6	7.2	27	----	1270	241	25	2.2	1.1	1.4	.91
30	2.1	3.9	7.1	26	----	645	245	25	1.6	1.3	1.4	1.0
31	2.1	----	6.8	90	----	582	----	23	----	1.2	1.4	----
TOTAL	64.2	766.0	207.3	886.1	2618	6193	9120	3656	219.7	50.6	45.6	42.06
MEAN	2.07	25.5	6.69	28.6	93.5	200	304	118	7.32	1.63	1.47	1.40
MAX	2.5	180	25	112	208	1620	534	248	19	3.4	2.1	1.7
MIN	1.6	2.1	2.8	6.5	56	36	238	23	1.6	1.1	1.1	.83
AC-FT	127	1520	411	1760	5190	12280	18090	7250	436	100	90	83

CAL YR 1978 TOTAL 32777.53 MEAN 89.8 MAX 1390 MIN .65 AC-FT 65010
WTR YR 1979 TOTAL 23865.26 MEAN 65.4 MAX 1620 MIN .83 AC-FT 47340

11040200 KEYS CREEK TRIBUTARY AT VALLEY CENTER, CA

LOCATION.--Lat 33°13'45", long 117°02'09", in NW¼SE¼SE¼ sec.12, T.11 S., R.2 W., San Diego County, Hydrologic Unit 18070303, on left bank 140 ft (43 m) upstream from bridge on Valley Center Road, 0.3 mi (0.5 km) downstream from unnamed tributary, and 0.8 mi (1.3 km) north of Valley Center.

DRAINAGE AREA.--7.65 mi^2 (19.81 km^2).

PERIOD OF RECORD.--April 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,279.99 ft (390.141 m) San Diego County Special District Services datum.

REMARKS.--Records poor. No regulation above station. Some pumping for irrigation above station.

AVERAGE DISCHARGE.--9 years, 1.47 ft^3/s (0.042 m^3/s), 1,070 acre-ft/yr (1.32 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft/s (29.7 m^3/s) Mar. 4, 1978, gage height, 7.44 ft (2.268 m); no flow for part of each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 25, 1969, 990 ft^3/s (28.0 m^3/s), by San Diego County Special District Services.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft^3/s (2.83 m^3/s), and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 18	1345	208	5.89	4.15	1.265	Mar. 1	1545	149	4.22	3.73	1.137
Jan. 6	0530	306	8.67	4.72	1.439	Mar. 19	0600	110	3.12	3.43	1.045
Jan. 31	1115	227	6.43	4.27	1.301	Mar. 21	0745	234	6.63	4.31	1.314
Feb. 21	0045	124	3.51	3.54	1.079	Mar. 28	0315	*318	9.01	4.78	1.457
Feb. 23	0045	162	4.59	3.83	1.167						

Minimum daily discharge, no flow many days July-Sept.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.22	.47	.99	30	68	8.1	1.2	1.3	.09	0	.01
2	.05	.17	.73	.99	17	14	7.5	1.4	1.3	.26	0	.01
3	.05	.31	.43	1.3	8.8	9.2	6.8	1.3	1.2	.16	0	.01
4	.05	.29	.42	1.3	6.6	7.9	5.9	1.2	1.2	.15	0	.01
5	.05	.26	.58	9.3	6.1	7.0	5.5	1.3	1.1	.15	0	.01
6	.05	.21	.80	90	5.9	6.2	5.4	1.3	1.3	.17	0	.01
7	.05	.23	.50	9.3	6.1	5.5	5.4	1.4	1.3	.11	0	.01
8	.05	.23	.41	5.2	6.2	4.9	5.3	1.6	1.2	.13	0	.03
9	.05	.26	.65	4.1	6.4	4.3	4.0	1.4	.85	.09	.01	.02
10	.05	.31	.60	2.8	6.5	3.8	5.5	1.3	.65	.05	.01	.02
11	.05	2.0	.54	2.2	6.6	3.4	4.9	1.3	.52	.04	.02	.02
12	.06	6.1	.58	1.9	6.8	3.0	4.4	1.3	.42	.06	.02	.02
13	.05	.80	.58	1.5	7.2	2.7	4.0	1.5	.40	.07	.02	.02
14	.06	4.3	.61	1.4	10	2.5	3.6	1.4	.32	.08	.03	.01
15	.06	.73	.67	2.7	8.0	2.2	3.1	1.4	.27	.08	.03	.01
16	.06	.40	.76	7.0	7.7	2.3	2.7	1.3	.35	.06	.03	.01
17	.09	.41	28	12	7.5	11	2.2	1.1	.40	.04	.02	.01
18	.09	.40	48	16	7.3	6.6	1.9	1.5	.43	.03	.02	.01
19	.09	.40	12	3.9	7.2	41	1.9	1.3	.44	.02	.04	.01
20	.10	.46	2.0	3.3	7.1	7.8	1.9	1.5	.42	.16	.15	.01
21	.11	1.3	2.2	2.1	43	52	1.9	1.4	.40	.19	.10	.02
22	.11	3.7	2.3	1.9	18	11	1.8	1.3	.35	.08	.05	.01
23	.11	1.0	2.3	1.7	43	6.8	1.7	1.3	.35	.04	.02	0
24	.12	5.1	2.0	1.7	13	6.0	1.8	1.3	.37	.02	.01	.01
25	.14	2.2	1.9	4.1	9.5	5.5	1.7	1.2	.37	0	0	0
26	.15	.94	1.4	1.9	7.5	5.2	1.7	1.1	.27	.01	0	0
27	.15	.65	2.0	1.6	5.8	57	1.6	1.2	.23	0	0	0
28	.14	.43	1.8	2.5	5.3	186	1.6	1.2	.15	0	0	.01
29	.11	.42	1.8	2.2	---	73	1.5	1.1	.10	0	.01	.01
30	.15	.42	2.1	2.7	---	11	2.1	1.1	.10	0	.01	.01
31	.21	---	1.3	88	---	9.0	---	1.2	---	0	.01	---
TOTAL	2.67	35.65	120.51	286.50	320.1	603.8	109.4	40.4	18.06	2.32	.61	.34
MEAN	.086	1.19	3.89	9.24	11.4	19.5	3.65	1.30	.60	.075	.020	.011
MAX	.21	6.1	48	90	43	186	8.1	1.6	1.3	.26	.15	.03
MIN	.04	.17	.41	.99	5.3	2.2	1.5	1.1	.10	0	0	0
AC-FT	5.3	71	239	568	635	1200	217	80	36	4.6	1.2	.7

CAL YR 1978 TOTAL 2692.50 MEAN 7.38 MAX 216 MIN 0 AC-FT 5340
WTR YR 1979 TOTAL 1420.44 MEAN 3.89 MAX 186 MIN 0 AC-FT 2820

11041000 SAN LUIS REY RIVER NEAR BONSALL, CA

LOCATION.--Lat 33°15'13", long 117°14'48", in SW¼NE¼NE¼ sec.1, T.11 S., R.4 W., San Diego County, Hydrologic Unit 18070303, on left bank 0.7 mi (1.1 km) downstream from bridge on State Highway 76, and 2.8 mi (4.5 km) southwest of Bonsall.

DRAINAGE AREA.--513 mi² (1,330 km²).

PERIOD OF RECORD.--July 1916 to September 1918 (gage heights and discharge measurements only), October 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 108.10 ft (32.949 m) National Geodetic Vertical Datum of 1929. See WSP 1315-B, 1735 for history of changes prior to Sept. 16, 1946.

REMARKS.--Records fair. Flow regulated by Lake Henshaw, capacity, 194,300 acre-ft (240 hm³). Several diversions above station.

AVERAGE DISCHARGE.--50 years, 23.2 ft³/s (0.657 m³/s), 16,810 acre-ft/yr (20.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,100 ft³/s (513 m³/s) Mar. 3, 1938, gage height, 16.04 ft (4.889 m), present datum, from rating curve extended above 2,400 ft³/s (68.0 m³/s); no flow for part of some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,590 ft³/s (130 m³/s) Mar. 28, gage height, 10.36 ft (3.158 m); minimum daily, 5.6 ft³/s (0.159 m³/s) Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	15	27	124	1700	773	600	300	52	13	12	10
2	12	15	44	130	1170	860	623	300	53	14	12	11
3	12	16	27	151	757	200	550	300	55	14	12	11
4	12	16	24	167	227	130	486	300	50	15	12	11
5	12	16	30	466	135	120	407	300	64	15	12	11
6	12	15	34	2630	120	110	503	300	70	15	12	11
7	12	16	29	916	113	121	427	300	70	16	12	12
8	12	16	24	237	112	119	442	300	48	16	12	13
9	13	17	26	146	114	116	443	300	36	16	12	13
10	13	24	33	105	116	101	550	300	26	16	12	14
11	13	152	30	83	105	101	520	240	22	16	12	14
12	13	362	30	91	102	102	418	150	20	17	13	14
13	13	10	29	88	101	102	382	117	19	17	15	14
14	13	146	29	89	219	100	365	106	18	18	14	15
15	13	25	32	854	211	100	344	90	18	18	14	15
16	13	15	34	1110	121	104	354	80	17	17	13	15
17	13	13	708	614	102	448	396	71	17	16	13	16
18	13	11	1160	826	102	196	330	64	16	16	14	13
19	14	10	1300	530	102	1300	344	59	15	16	16	13
20	14	11	552	190	96	654	342	56	14	19	19	13
21	14	19	253	158	927	1150	358	55	14	22	18	14
22	14	246	104	141	1010	602	354	53	15	22	16	14
23	14	61	150	126	1040	167	336	50	15	22	15	14
24	14	76	120	129	435	116	326	46	15	20	15	15
25	14	126	127	123	136	119	300	39	16	15	15	6.6
26	14	35	124	112	110	110	300	45	17	13	15	6.1
27	14	26	125	92	101	620	300	62	16	11	12	5.6
28	14	22	139	115	98	3560	300	57	15	12	11	6.6
29	15	21	152	117	---	2050	300	50	14	12	12	13
30	15	21	150	101	---	1220	300	53	13	11	11	9.3
31	14	---	130	1100	---	890	---	50	---	11	10	---
TOTAL	412	1601	6042	11727	9676	16489	12160	4601	866	486	413	361.2
MEAN	13.3	53.4	195	378	346	532	405	148	28.8	15.6	13.3	12.0
MAX	16	362	1300	2630	1700	3560	600	300	70	22	19	15
MIN	12	10	24	83	96	101	300	39	13	11	10	5.6
AC-FT	817	3180	11980	23260	19190	32710	24100	9130	1720	964	819	716

CAL YR 1978 TOTAL 68711.0 MEAN 188 MAX 3760 MIN 5.2 AC-FT 136300
WTR YR 1979 TOTAL 64820.2 MEAN 178 MAX 3560 MIN 5.6 AC-FT 128600

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA
(National stream-quality accounting network station)

LOCATION.--Lat 33°12'48", long 117°22'33", in SW¼SE¼SW¼ sec.14, T.11 S., R.5 W., San Diego County, Hydrologic Unit 18070303, on right bank 0.7 mi (1.1 km) upstream from bridge on Interstate Highway 5, 1.1 mi (1.8 km) upstream from mouth, and 1.2 mi (1.9 km) north of Oceanside.

DRAINAGE AREA.--558 mi² (1,450 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1912 to September 1914 (published as "near Oceanside"), January 1916, October 1929 to January 1942, October 1946 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6.1 m), from topographic map. April 1912 to September 1914, nonrecording gage at site 0.8 mi (1.3 km) upstream at different datum. January 1916, nonrecording gage 0.2 mi (0.3 km) downstream at different datum. Prior to Oct. 1, 1978, at datum 10.00 ft (3.048 m) lower.

REMARKS.--Records poor. Flow regulated by Lake Henshaw, capacity, 194,300 acre-ft (240 hm³). Several diversions for irrigation and domestic use above station. AVERAGE DISCHARGE represents flow to ocean during period of record regardless of upstream development.

AVERAGE DISCHARGE.--47 years (water years 1913-14, 1930-41, 1947-79), 22.3 ft³/s (0.632 m³/s), 16,100 acre-ft/yr (19.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 95,600 ft³/s (2,710 m³/s) Jan. 27, 1916, from hydrograph based on discharge measurements; no flow for several months in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,100 ft³/s (144 m³/s) Mar. 28, gage height, 18.6 ft (5.67 m); minimum daily, 5.0 ft³/s (0.14 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	7.8	36	92	1500	960	690	295	55	10	7.0	6.2
2	5.1	7.9	61	105	1080	1020	660	292	55	10	6.9	6.2
3	5.2	8.2	49	193	650	600	540	290	55	10	6.9	6.1
4	5.2	8.6	41	188	380	210	500	290	56	9.8	6.8	6.1
5	5.3	8.8	38	235	140	185	490	290	50	9.6	6.8	6.1
6	5.4	8.4	49	2600	122	170	490	290	66	9.5	6.8	6.0
7	5.4	10	48	900	118	150	540	290	64	9.4	6.7	6.0
8	5.5	10	36	220	120	143	525	290	32	9.2	6.6	6.0
9	5.6	11	42	150	120	137	415	290	27	9.0	6.6	6.0
10	5.6	41	46	96	115	130	415	285	23	8.9	6.6	6.0
11	5.7	130	44	85	108	120	390	160	20	8.8	6.6	6.0
12	5.8	270	42	93	108	125	385	122	19	8.7	6.6	6.0
13	5.9	175	40	89	130	129	380	103	19	8.6	6.5	6.0
14	6.0	98	41	96	230	150	370	91	18	8.4	6.5	6.0
15	6.2	54	42	910	280	135	364	82	17	8.3	6.4	6.0
16	6.2	40	110	1200	118	620	350	72	17	8.2	6.4	6.0
17	6.3	33	800	650	100	250	340	67	16	8.0	6.4	6.0
18	6.3	31	1200	680	99	450	340	61	15	8.0	6.4	6.0
19	6.4	29	1450	580	98	1580	330	55	15	8.0	6.4	6.0
20	6.4	28	840	200	98	660	330	53	14	7.8	6.4	6.0
21	6.4	29	120	160	1100	1400	325	49	14	7.8	6.3	6.0
22	6.5	145	98	132	1220	580	320	47	13	7.7	6.3	6.0
23	6.6	210	89	132	1320	160	315	46	13	7.6	6.3	6.0
24	6.6	85	67	132	600	156	310	44	12	7.5	6.3	5.9
25	6.6	125	66	115	270	160	308	45	12	7.4	6.2	5.9
26	6.6	65	92	102	142	270	300	48	12	7.3	6.2	5.9
27	6.8	42	97	96	120	660	300	52	11	7.3	6.2	5.9
28	6.9	36	110	110	123	3800	300	55	11	7.2	6.2	5.9
29	7.0	34	100	116	---	2200	290	55	11	7.2	6.2	5.9
30	7.3	33	94	180	---	1200	297	55	10	7.1	6.2	5.9
31	7.5	---	90	1920	---	980	---	55	---	7.0	6.2	---
TOTAL	189.3	1813.7	6078	12557	10327	19566	11053	4319	779	259.3	200.9	180.0
MEAN	6.11	60.5	196	405	369	631	368	139	26.0	8.36	6.48	6.00
MAX	7.5	270	1450	2600	1500	3800	690	295	66	10	7.0	6.2
MIN	5.0	7.8	36	85	98	125	290	44	10	7.0	6.2	5.9
AC-FT	375	3600	12060	24910	20480	38810	21920	8570	1550	514	398	357

CAL YR 1978 TOTAL 61530.6 MEAN 169 MAX 3000 MIN 2.1 AC-FT 122000
WTR YR 1979 TOTAL 68124.2 MEAN 187 MAX 3800 MIN 5.0 AC-FT 135100

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to current year.
CHEMICAL ANALYSES: January 1978 to September 1978.
BIOLOGICAL DATA: January 1978 to September 1978.
WATER TEMPERATURES: Water years 1971 to current year.
SEDIMENT RECORDS: Water year 1969 to September 1978.
PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1970 to current year.
SEDIMENT RECORDS: October 1968 to September 1978.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 5,580 mg/L Jan. 17, 1978; minimum daily, 2 mg/L on several days in 1972 and 1977.
SEDIMENT DISCHARGE: Maximum daily, 59,700 tons (54,200 metric tons) Jan. 17, 1978; minimum daily, 0.01 tons (0.01 metric tons) Nov. 4, 1969.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT												
23...	1345	17	2420	8.2	20.5	29	10.8	640	K320	820	580	180
NOV												
30...	1100	33	2280	8.2	11.0	27	11.0	K5600	--	860	600	180
DEC												
22...	0940	97	2180	7.3	8.0	140	11.2	2500	1900	730	490	160
JAN												
29...	1300	117	2010	8.0	11.0	22	11.3	1750	K13000	720	510	170
FEB												
22...	1100	413	1050	7.6	13.0	580	10.2	K6000	28000	380	260	83
MAR												
13...	1420	99	1450	8.1	20.0	2.1	8.7	1400	K1400	590	400	130
APR												
10...	1230	413	850	7.8	18.5	180	8.8	1800	2400	290	160	68
MAY												
30...	1420	55	1700	8.4	24.0	21	8.1	5300	K600	420	400	140
JUN												
28...	1230	11	1970	8.5	--	18	7.9	K300	860	560	400	110
JUL												
26...	1235	7.2	1995	8.3	33.0	4.0	8.2	--	--	680	480	140
SEP												
11...	1415	6.0	2150	8.4	27.0	.90	10.6	930	700	650	470	130

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT											
23...	90	230	38	3.5	18	240	400	460	.4	21	1630
NOV											
30...	100	180	31	2.7	7.2	260	410	380	.3	29	1540
DEC											
22...	80	200	37	3.2	9.4	240	400	360	.3	28	1420
JAN											
29...	72	180	35	2.9	6.9	210	380	350	.3	30	1460
FEB											
22...	41	88	33	2.0	6.3	120	220	160	.2	24	705
MAR											
13...	45	130	32	2.3	5.2	190	320	230	.3	30	1000
APR											
10...	28	66	33	1.7	4.6	130	150	100	.2	27	590
MAY											
30...	65	150	34	2.6	6.7	220	330	260	.4	29	1180
JUN											
28...	70	180	41	3.3	4.0	160	360	320	.2	15	965
JUL											
26...	81	180	36	3.0	8.8	200	390	360	.4	20	1500
SEP											
11...	80	200	40	3.4	8.8	180	440	360	.4	27	1420

K Results based on colony count outside the acceptable range (non-ideal colony count).

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT											
23...	1540	4.5	--	.08	1.0	1.1	.12	.98	5.6	.37	.20
NOV											
30...	1440	2.6	--	.21	.89	1.1	--	--	3.7	.35	.23
DEC											
22...	1360	2.1	--	.18	1.4	1.6	.40	1.2	3.7	.54	.21
JAN											
29...	1320	2.8	--	.16	1.3	1.5	.40	1.1	4.3	.37	.20
FEB											
22...	693	2.1	--	.06	3.4	3.5	2.7	.78	5.6	2.20	.13
MAR											
13...	1020	2.0	--	.01	.48	.49	.00	.50	2.5	.22	.12
APR											
10...	522	1.2	--	.03	1.3	1.3	.85	.45	2.5	.25	.11
MAY											
30...	1110	1.5	--	.03	.67	.70	.22	.48	2.2	.16	.12
JUN											
28...	1160	.69	--	.01	.69	.70	.59	.11	1.4	.06	.04
JUL											
26...	1290	1.2	--	.04	.76	.80	--	--	2.0	.18	.16
SEP											
11...	1360	1.5	1.4	.05	.04	.09	.54	.35	2.4	.09	.04

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT				
01...	--	--	2400	24.0
07...	1200	--	2610	21.0
08...	1230	--	2560	23.0
09...	1145	--	2530	23.0
11...	1400	--	2590	23.0
14...	1200	--	2530	22.0
17...	1430	--	2480	23.0
21...	1400	--	2410	--
23...	1345	17	2420	20.5
24...	1530	--	2490	24.0
25...	1430	--	2460	23.0
28...	1230	--	2420	21.0
31...	1645	--	2370	21.0
NOV				
01...	1530	--	2370	21.0
04...	1200	--	2350	--
06...	1700	--	2380	21.0
08...	1630	--	2390	21.0
09...	1600	--	2350	20.0
10...	1600	--	2340	18.0
11...	1000	--	2130	12.0
12...	1000	--	2130	11.0
14...	1600	--	2200	16.0
15...	1600	--	2280	17.0
16...	1700	--	2290	17.0
17...	1700	--	2330	18.0
18...	1500	--	2350	17.0
19...	1200	--	2360	18.0
20...	1700	--	2340	18.0
26...	1530	--	2260	17.0
29...	1330	--	2330	16.0
30...	1100	33	2200	11.0
DEC				
22...	0940	97	2100	8.0
JAN				
29...	1300	117	2010	11.0
FEB				
14...	1500	--	1650	18.0
15...	1600	--	1650	18.0
16...	1630	--	1860	18.0
17...	1300	--	1860	18.0
18...	1700	--	1870	19.0
19...	1700	--	1870	18.0
21...	1600	--	1160	15.0
22...	1100	413	1050	13.0
22...	1630	--	1170	16.0
23...	1730	--	1170	16.0
24...	1200	--	1520	16.0
25...	1500	--	1520	17.0
26...	1645	--	1610	18.0
27...	1530	--	1640	19.0
28...	1530	--	1680	19.0
MAR				
01...	1730	--	1400	14.0
02...	1700	--	1420	16.0
03...	1630	--	1420	17.0
04...	1800	--	1570	19.0
05...	1530	--	1620	20.0
06...	1730	--	1620	21.0
07...	1730	--	1650	23.0
08...	1700	--	1660	21.0
09...	1730	--	1690	20.0
13...	0915	122	--	16.0
13...	1420	99	1450	20.0
APR				
10...	1230	413	850	18.5
MAY				
30...	1420	55	1700	26.0
JUN				
28...	1230	11	1970	--
28...	1630	--	2230	30.0
29...	1730	--	2240	30.0
30...	1930	--	2330	27.0
JUL				
01...	1400	--	2400	28.0
03...	1700	--	2410	29.0
04...	1430	--	2400	30.0
05...	1630	--	2360	30.0
06...	1700	--	2380	29.0
07...	1830	--	2420	29.0

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
JUL				
09...	1700	--	2470	30.0
10...	1600	--	2440	31.0
11...	1630	--	2500	32.0
12...	1800	--	2460	29.0
13...	1700	--	2450	29.0
14...	1730	--	2340	28.0
16...	1600	--	2240	30.0
17...	1700	--	2250	31.0
18...	1700	--	2210	31.0
19...	1630	--	2200	30.0
20...	1700	--	2120	30.0
21...	1730	--	2210	29.0
22...	1730	--	2230	30.0
23...	1800	--	2200	29.0
24...	1630	--	2250	29.0
25...	1630	--	2280	30.0
26...	1235	7.2	1995	33.0
26...	1700	--	2340	30.0
27...	1700	--	2360	30.0
28...	1900	--	2400	29.0
29...	1630	--	2410	30.0
30...	1700	--	2420	31.0
31...	1630	--	2400	30.0
AUG				
04...	1730	--	2410	28.0
05...	1630	--	2400	32.0
06...	1600	--	2370	33.0
07...	1730	--	2400	33.0
08...	1600	--	2470	32.0
09...	1730	--	2400	32.0
10...	1730	--	2540	32.0
12...	1600	--	2310	29.0
13...	1700	--	2310	29.0
14...	1700	--	2350	30.0
15...	1630	--	2290	31.0
20...	1630	--	2220	26.0
21...	1800	--	2290	27.0
22...	1630	--	2320	28.0
24...	1530	--	2410	30.0
28...	1500	--	2440	30.0
29...	1630	--	2400	31.0
SEP				
06...	1530	--	2450	30.0
11...	1415	6.0	2150	27.0

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
OCT										
23...	1345	2	2	0	0	0	9	0	1	0
JAN										
29...	1300	2	1	200	200	0	44	13	31	20
APR										
10...	1230	1	1	300	300	0	15	3	12	30
JUL										
26...	1235	5	8	100	0	100	--	0	1	10

DATE	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)
OCT										
23...	0	0	0	0	0	9	3	6	1600	1600
JAN										
29...	18	2	4	3	1	15	12	3	9000	9600
APR										
10...	30	0	13	13	0	21	18	3	25000	25000
JUL										
26...	10	0	0	0	0	29	27	2	370	360

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)
OCT 23...	50	63	35	28	410	30	380	.0	.0	.0
JAN 29...	30	91	51	40	380	210	170	.0	.0	.0
APR 10...	30	--	0	170	460	450	10	.2	.1	.1
JUL 26...	30	7	7	0	90	40	50	.1	.0	.1

DATE	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLF (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
OCT 23...	10	0	10	0	0	0	40	30	10
JAN 29...	2	1	1	0	0	0	50	30	20
APR 10...	2	1	1	0	0	0	80	60	20
JUL 26...	1	0	1	0	0	0	50	30	20

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)
OCT 23...	1345	--	8.6	--
NOV 30...	1100	6.7	--	--
DEC 22...	0940	15	--	--
JAN 29...	1300	--	6.7	3.3
FEB 22...	1100	29	--	--
MAR 13...	1420	8.6	--	--
APR 10...	1230	--	4.9	6.5
MAY 30...	1420	4.5	--	--
JUN 28...	1230	5.9	--	--
JUL 26...	1235	--	7.0	.3
SEP 11...	1415	7.1	--	--

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	OCT 23,78		NOV 30,78		MAR 13,79		MAY 30,79		JUN 28,79		SEP 11,79	
TIME	1345		1100		1420		1420		1230		1415	
TOTAL CELLS/ML	25000		1400		1500		8200		14000		6200	
DIVERSITY: DIVISION	0.3		1.3		1.8		0.1		0.8		1.5	
.CLASS	0.3		1.3		1.8		0.1		0.8		1.5	
..ORDER	0.7		1.7		2.6		0.5		1.5		1.7	
...FAMILY	1.1		3.1		2.8		0.5		1.5		2.3	
....GENUS	1.1		3.2		0.8		0.5		1.5		2.6	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHARACIACEAE												
....SCHROEDERIA	--	-	--	-	29	2	--	-	--	-	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	44	3	--	-	--	-	100	1	110	2
....SELENASTRUM	--	-	--	-	--	-	--	-	--	-	46	1
...SCENEDESMACEAE												
....ACTINASTRUM	--	-	--	-	--	-	--	-	--	-	430	7
....SCENEDESMUS	490	2	89	7	--	-	--	-	--	-	890	14
....TETRASTRUM	--	-	--	-	--	-	--	-	--	-	92	1
..TETRASPORALES												
...PALMELLACEAE												
....SPHAEROCYSTIS	--	-	--	-	230#	16	--	-	--	-	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE	--	-	--	-	57	4	--	-	--	-	--	-
....CHLAMYDOMONAS	240	1	89	7	--	-	--	-	100	1	--	-
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	1900	8	44	3	57	4	7400#	90	8500#	60	230	4
....MELOSIRA	--	-	--	-	110	8	--	-	--	-	--	-
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	--	-	--	-	--	-	--	-	--	-	*	0
...CYMBELLACEAE												
....AMPHORA	--	-	--	-	--	-	--	-	--	-	46	1
....CYMBELLA	--	-	44	3	--	-	--	-	--	-	--	-
...FRAGILARIACEAE												
....SYNEDRA	--	-	22	2	29	2	--	-	--	-	--	-
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	44	3	--	-	--	-	--	-	*	0
...NAVICULACEAE												
....DIPLONEIS	--	-	--	-	--	-	--	-	--	-	*	0
....ENTOMONEIS	--	-	22	2	--	-	--	-	--	-	--	-
....NAVICULA	20000#	81	180	13	86	6	--	-	--	-	820	13
...NITZSCHIACEAE												
....NITZSCHIA	1500	6	440#	33	57	4	710	9	3000#	21	1500#	24
...SURIRELLACEAE												
....SURIRELLA	240	1	130	10	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOMONADACEAE												
....CRYPTOMONAS	--	-	--	-	14	1	140	2	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....AGMENELLUM	--	-	--	-	110	8	--	-	--	-	--	-
....ANACYSTIS	--	-	--	-	57	4	--	-	--	-	--	-
..HORMOGONALES												
...NOSTOCACEAE												
....ANABAENA	--	-	130	10	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE												
....OSCILLATORIA	--	-	--	-	550#	37	--	-	2500#	18	1900#	31
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUGLENA	490	2	22	2	43	3	--	-	--	-	--	-
....PHACUS	--	-	22	2	43	3	--	-	--	-	--	-
....TRACHELOMONAS	--	-	22	2	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM, EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

		PERIPHYTON				
DATE	TIME	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	LENGTH OF EXPOSURE (DAYS)
NOV						
30...	1100	13.2	2.58	7.56	6.22	37
MAR						
13...	0915	.030	.000	.080	.000	103
JUL						
26...	1235	.115	<.016	.124	.061	107

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
23...	1345	17	20.5	78	64
NOV					
30...	1100	33	11.0	103	86
DEC					
22...	0940	97	8.0	444	70
JAN					
29...	1300	117	11.0	582	31
FEB					
22...	1100	413	13.0	2220	50
MAR					
13...	1420	99	20.0	358	56
APR					
10...	1230	413	18.5	1140	30
MAY					
30...	1420	55	26.0	85	72
JUN					
28...	1230	11	--	61	51
JUL					
26...	1235	7.2	33.0	38	36
SEP					
11...	1415	6.0	27.0	9	67

11042400 TEMECULA CREEK NEAR AGUANGA, CA

LOCATION.--Lat 33°27'33", long 116°55'22", in NE¼SW¼SW¼ sec.19, T.8 S., R.1 E., Riverside County, Hydrologic Unit 18070302, on right bank 1.6 mi (2.6 km) downstream from Long Canyon, and 3.5 mi (5.6 km) northwest of Aguanga.

DRAINAGE AREA.--131 mi² (339 km²).

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,590 ft (485 m), from topographic map.

REMARKS.--Records good. No regulation above station. Pumping for irrigation above station.

AVERAGE DISCHARGE.--22 years, 4.93 ft³/s (0.140 m³/s), 3,570 acre-ft/yr (4.40 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,540 ft³/s (100 m³/s) Apr. 3, 1958, gage height, 6.57 ft (2.003 m), from rating curve extended above 1,200 ft³/s (34 m³/s); maximum gage height, 10.6 ft (3.23 m) Feb. 25, 1969; no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) revised, and maximum (*), from rating curve extended above 700 ft³/s (19.8 m³/s) on basis of slope-area measurements at gage height 7.34 ft (2.237 m):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 18	1630	189	5.35	2.78	0.847	Feb. 21	0845	198	5.61	2.84	0.866
Jan. 6	0700	306	8.67	3.22	0.981	Mar. 1	1630	127	3.60	2.53	0.771
Jan. 31	1345	176	4.98	2.74	0.835	Mar. 28	0345	*1,400	39.6	5.65	1.722

Minimum daily discarge, 0.29 ft³/s (0.008 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.29	.85	1.9	3.2	87	53	69	12	5.6	1.3	.69	.54
2	.40	.85	2.0	2.9	52	48	55	12	5.3	1.5	.69	.45
3	.40	.82	1.9	2.9	38	33	46	12	5.3	1.7	.72	.42
4	.37	.72	1.8	2.7	30	28	40	11	5.8	1.9	.70	.42
5	.41	.63	1.8	5.6	25	25	37	11	5.0	1.8	.73	.43
6	.49	.67	1.8	132	22	22	34	11	4.8	1.6	.80	.44
7	.49	.59	1.8	37	21	21	31	10	5.1	1.4	.73	.42
8	.52	.57	1.8	21	20	20	29	10	5.5	1.3	.72	.37
9	.54	.63	1.7	16	19	18	27	9.9	3.9	1.2	.71	.39
10	.53	.78	1.7	13	18	17	25	9.6	3.3	1.0	.70	.36
11	.61	1.5	1.8	11	17	16	24	9.0	3.1	.98	.77	.36
12	.61	2.6	1.8	9.2	17	15	22	8.4	2.9	1.0	1.0	.38
13	.55	1.6	1.8	8.0	16	15	21	7.9	2.6	1.1	.97	.41
14	.49	1.8	1.8	7.3	29	15	20	7.5	2.5	1.0	.94	.45
15	.57	1.7	1.8	11	25	14	19	7.2	2.3	.96	.87	.51
16	.70	1.6	1.8	23	20	13	18	7.3	2.5	.95	.85	.40
17	.79	1.5	11	21	18	17	17	7.6	2.8	.82	.91	.42
18	.85	1.3	85	33	16	16	17	7.2	3.3	.77	.81	.45
19	.83	1.3	70	28	15	24	16	7.5	3.2	.73	.88	.45
20	.92	1.2	24	20	14	27	15	8.0	2.8	1.9	1.0	.45
21	.95	1.4	14	17	75	30	15	8.3	2.6	1.9	.88	.60
22	.94	3.5	9.8	14	73	28	14	7.3	2.4	1.6	.80	.56
23	.81	2.9	7.7	12	55	23	14	6.5	2.2	1.0	.62	.56
24	.82	4.3	6.3	11	39	21	13	6.0	2.2	.95	.53	.71
25	.93	4.2	5.6	11	31	20	13	6.0	2.1	.86	.46	.81
26	.93	3.0	4.9	10	27	19	12	5.8	1.9	.78	.45	.75
27	.86	2.5	4.5	8.8	23	130	12	5.8	1.6	.76	.51	.80
28	.74	2.2	4.2	10	21	592	12	6.0	1.4	.66	.58	.80
29	.76	2.0	3.9	9.1	---	183	12	6.1	1.3	.61	.60	.80
30	.80	1.9	3.7	8.2	---	112	12	5.8	1.2	.58	.69	.80
31	.85	---	3.5	87	---	83	---	5.6	---	.71	.63	---
TOTAL	20.75	51.31	287.1	605.9	863	1698	711	255.3	96.5	35.12	23.21	15.50
MEAN	.67	1.71	9.26	19.5	30.8	54.8	23.7	8.24	3.22	1.13	.75	.52
MAX	.95	4.3	85	132	87	592	69	12	5.8	1.9	1.0	.81
MIN	.29	.57	1.7	2.7	14	13	12	5.6	1.2	.58	.45	.36
AC-FT	41	102	569	1200	1710	3370	1410	506	191	70	46	31

CAL YR 1978 TOTAL 6643.21 MEAN 18.2 MAX 440 MIN .01 AC-FT 13180
WTR YR 1979 TOTAL 4662.78 MEAN 12.8 MAX 592 MIN .29 AC-FT 9250

11042510 VAIL LAKE NEAR TEMECULA, CA

LOCATION.--Lat 33°29'44", long 116°58'33", in Pauba Grant, Riverside County, Hydrologic Unit 18070302, near center of Vail Dam, 0.2 mi (0.3 km) downstream from Arroyo Seco, and 10 mi (16 km) east of Temecula.

DRAINAGE AREA.--320 mi^2 (829 km^2).

PERIOD OF RECORD.--October 1960 to current year. October 1960 to September 1977 published with Temecula Creek at Vail Dam.

GAGE.--Non-recording gage. Prior to June 3, 1979, water-stage recorder at same site and datum. Datum of gage is 1,350.0 ft (411.48 m) National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service); gage readings have been reduced to elevations above NGVD.

REMARKS.--Reservoir is formed by a concrete arch-type dam with spillway on left end, completed in June 1929. Capacity of reservoir at spillway level, 49,370 acre-ft (60.9 hm^3), elevation, 1,470 ft (448.056 m). Dead storage, 2.4 acre-ft (2,960 m^3) below lowest outlet at elevation 1,352.5 ft (412.24 m). Area-capacity tables for reservoir are based on a survey made in 1947. There has been no spill since November 13, 1948, date of closure. Water is released as required down Temecula Creek for diversion about 1 mi (1.6 km) below dam.

COOPERATION.--Water levels were furnished by Rancho California Water District, March to September 1979.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 37,230 acre-ft (45.9 hm^3) May 31, 1979, elevation, 1,457.80 ft (444.337 m); minimum, 1,038 acre-ft (1.28 hm^3) Oct. 31, 1960, elevation, 1,379.44 ft (420.453 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 37,230 acre-ft (45.9 hm^3) May 31, elevation, 1,457.80 ft (444.337 m); minimum, 11,900 acre-ft (14.6 hm^3) Jan. 3, elevation 1,421.15 ft (433.2 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	1,450.22	30,600	--
Oct. 31	1,449.82	30,280	-320
Nov. 30	1,449.04	29,630	-650
Dec. 31	1,421.74	12,160	-17,470
CAL YR 1978	--	--	-3,850
Jan. 31	*	*	*
Feb. 28	*	*	*
Mar. 31	1,454.00	33,820	+21,660
Apr. 30	1,457.00	36,490	+2,670
May 31	1,457.80	37,230	+740
June 30	1,456.60	36,130	-1,100
July 31	1,456.00	35,590	-540
Aug. 31	1,453.60	33,470	-2,120
Sept. 30	1,452.00	32,090	-1,380
WTR YR 1979	--	--	+1,490

* Gage not accessible.

11043000 MURRIETA CREEK AT TEMECULA, CA

LOCATION.--Lat 33°28'47", long 117°08'35", in Temecula Grant, Riverside County, Hydrologic Unit 18070302, on right bank 0.4 mi (0.6 km) upstream from mouth, and 1.0 mi (1.6 km) south of Temecula.

DRAINAGE AREA.--222 mi^2 (575 km^2)

PERIOD OF RECORD.--October 1924 to current year. Monthly discharge only October 1924 to September 1930, published in WSP 1315-B.

GAGE.--Water-stage recorder. Altitude of gage is 970 ft (296 m), from topographic map. See WSP 1735 for history of changes prior to Dec. 16, 1938.

REMARKS.--Records fair. No regulation above station. Pumping above station for irrigation of about 2,500 acres (10.1 km^2).

AVERAGE DISCHARGE.--55 years, 9.73 ft^3/s (0.276 m^3/s), 7,050 acre-ft/yr (8.69 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,500 ft^3/s (496 m^3/s) Jan. 23, 1943, gage height, 13.82 ft (4.212 m); minimum daily, 0.02 ft^3/s (0.001 m^3/s) at times in 1969, no flow Dec. 11, 1976 because of upstream channel work.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft^3/s (4.25 m^3/s) revised, and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 6	0145	*7,050	200	9.25	2.819	Mar. 19	1015	271	7.67	2.80	0.853
Jan. 15	2100	152	4.30	2.29	0.698	Mar. 27	1830	946	26.8	4.41	1.344
Jan. 31	0700	2,690	76.2	6.45	1.966						

Minimum daily discharge, 0.15 ft^3/s (0.004 m^3/s) Nov. 18-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.53	.59	1.8	.78	314	21	15	2.2	.99	.71	.50	.50
2	.53	.59	1.1	.78	130	19	14	1.7	.99	.72	.47	.50
3	.46	.59	.76	.78	83	10	38	1.5	.99	.72	.46	.46
4	.53	.53	.76	.78	62	7.8	42	1.4	.99	.74	.50	.50
5	.53	.53	.78	404	50	6.4	19	1.4	1.1	.77	.50	.50
6	.59	.46	.73	1830	24	5.0	17	1.3	.99	.69	.50	.50
7	.59	.46	.68	500	19	4.1	15	1.3	1.1	.70	.46	.50
8	.59	.46	.66	30	17	3.4	14	1.4	.92	.69	.46	.55
9	.53	.46	.69	8.5	16	2.6	14	1.4	.84	.67	.46	.50
10	.59	1.1	.66	6.0	14	1.9	13	1.4	.83	.66	.46	.42
11	.59	2.7	.66	3.4	13	1.6	9.4	1.3	.81	.66	.46	.42
12	.59	1.8	.66	2.5	11	1.6	8.9	1.3	.78	.68	.50	.38
13	.66	.89	.64	1.9	10	1.7	7.3	1.3	.74	.68	.50	.38
14	.59	1.2	.63	1.8	13	1.5	6.1	1.2	.73	.71	.50	.34
15	.77	.29	.70	44	11	1.5	5.2	1.1	.77	.73	.46	.34
16	.66	.22	.70	32	8.5	1.5	5.4	1.1	.82	.71	.46	.31
17	.66	.19	14	16	7.5	16	5.2	1.0	.84	.69	.50	.34
18	.53	.15	15	15	6.6	11	4.9	1.0	.78	.68	.50	.38
19	.53	.15	16	16	6.3	122	4.5	1.1	.77	.66	.50	.36
20	.53	.15	1.9	10	6.3	38	4.1	1.0	.76	1.2	.50	.34
21	.53	4.5	1.0	7.8	48	20	4.0	.97	.78	.85	.50	.38
22	.53	2.7	.87	6.9	30	14	3.7	.91	.73	.70	.50	.34
23	.46	1.2	.84	6.1	58	11	3.8	.89	.69	.65	.46	.34
24	.53	4.0	.84	5.8	22	9.7	3.6	.93	.75	.60	.46	.34
25	.53	1.3	.84	5.5	14	8.9	3.3	.90	.72	.60	.46	.34
26	.53	.99	.84	4.5	11	8.3	3.3	.99	.71	.60	.46	.31
27	.53	.92	.84	3.8	9.7	276	4.2	1.0	.70	.60	.50	.34
28	.59	.82	.84	3.8	8.1	541	4.6	1.0	.69	.58	.55	.34
29	.59	.81	.84	4.5	---	169	4.7	.97	.69	.56	.55	.38
30	.59	.88	1.1	4.7	---	90	2.9	1.0	.69	.54	.50	.38
31	.59	---	.78	1290	---	20	---	.96	---	.52	.50	---
TOTAL	17.58	31.63	69.14	4267.62	1023.0	1445.5	300.1	36.92	24.69	21.27	15.09	12.03
MEAN	.57	1.05	2.23	138	36.5	46.6	10.0	1.19	.82	.69	.49	.40
MAX	.77	4.5	16	1830	314	541	42	2.2	1.1	1.2	.55	.55
MIN	.46	.15	.63	.78	6.3	1.5	2.9	.89	.69	.52	.46	.31
AC-FT	35	63	137	8460	2030	2870	595	73	49	42	30	24

CAL YR 1978 TOTAL 27654.61 MEAN 75.8 MAX 4840 MIN .15 AC-FT 54850
WTR YR 1979 TOTAL 7264.57 MEAN 19.9 MAX 1830 MIN .15 AC-FT 14410

11044000 SANTA MARGARITA RIVER NEAR TEMECULA, CA

LOCATION.--Lat 33°28'26", long 117°08'29", in Temecula Grant, Riverside County, Hydrologic Unit 18070302, on left bank at upper end of Temecula Canyon, 0.1 mi (0.2 km) downstream from Murrieta Creek, 1.4 mi (2.3 km) south of Temecula, and 10 mi (16 km) downstream from Vail Lake.

DRAINAGE AREA.--588 mi^2 (1,520 km^2).

PERIOD OF RECORD.--January 1923 to current year. Prior to October 1952, published as Temecula Creek at Railroad Canyon, near Temecula.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 950 ft (290 m), from topographic map. Prior to Nov. 3, 1966, at site 100 ft (30 m) downstream at same datum.

REMARKS.--Records fair. Flow partly regulated since November 1948 by Vail Lake (station 11042500). Pumping above station for irrigation.

AVERAGE DISCHARGE.--25 years (water years 1924-48), unregulated, 28.2 ft^3/s (0.799 m^3/s), 20,420 acre-ft/yr (25.2 hm^3/yr); 31 years (water years 1949-79), 12.1 ft^3/s (0.343 m^3/s), 8,770 acre-ft/yr (10.8 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft^3/s (708 m^3/s) Feb. 16, 1927, gage height, 14.6 ft (4.45 m), at site then in use, from rating curve extended above 10,000 ft^3/s (283 m^3/s); minimum daily, 0.30 ft^3/s (0.008 m^3/s) Aug. 18-22, 1965, regulation by construction work above station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,420 ft^3/s (182 m^3/s), Jan. 6, gage height, 11.07 ft (3.374 m); minimum daily discharge, 0.83 ft^3/s (0.024 m^3/s) July 31, Aug. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.7	4.0	3.5	403	42	14	4.7	2.6	1.7	.83	1.3
2	1.4	1.6	2.9	3.1	150	35	11	3.5	2.5	1.7	.88	1.3
3	1.6	1.6	2.2	3.6	93	25	54	3.3	2.5	1.8	1.0	1.4
4	1.6	1.6	2.0	3.6	43	15	60	3.1	2.6	1.7	.98	2.2
5	1.8	1.6	2.2	402	29	10	30	3.3	2.8	2.9	1.0	2.2
6	1.8	1.6	1.9	1850	27	8.0	25	3.0	2.7	.99	1.1	2.2
7	1.7	1.5	1.7	86	20	6.9	22	3.1	2.8	1.5	1.3	2.0
8	1.8	1.6	1.8	30	15	6.9	19	3.6	2.9	1.8	1.4	2.2
9	1.5	1.6	1.9	13	13	6.5	16	3.3	2.3	1.1	1.0	2.0
10	1.6	3.3	2.0	8.0	12	5.1	14	3.3	2.0	1.2	1.1	2.0
11	1.6	16	2.0	5.6	11	5.8	13	3.1	1.9	1.3	1.1	2.0
12	1.7	12	2.0	4.3	10	4.3	12	2.7	1.9	1.3	1.6	1.8
13	1.6	5.6	2.0	3.5	9.2	5.7	11	2.4	1.8	1.4	1.6	1.8
14	1.6	8.1	2.1	3.3	8.8	5.5	10	2.2	1.6	1.3	1.6	1.8
15	1.8	2.7	2.3	95	8.6	5.5	9.0	2.2	2.2	1.3	1.4	1.6
16	2.1	2.2	2.4	79	8.2	5.9	8.0	2.4	1.6	1.1	1.3	1.6
17	2.2	2.2	44	42	7.8	38	7.0	2.4	2.2	1.1	1.4	1.6
18	2.0	2.1	44	51	7.6	26	6.8	2.4	1.9	1.1	1.6	1.4
19	2.0	2.0	39	32	7.5	156	7.0	2.5	1.9	1.2	1.6	1.6
20	2.0	2.0	8.5	10	7.4	62	6.7	2.6	1.8	2.6	1.6	1.6
21	2.2	14	5.7	6.7	95	33	6.6	2.5	1.9	1.4	1.6	1.4
22	1.8	11	4.8	6.4	60	25	6.4	2.3	2.0	1.4	1.4	1.6
23	1.8	2.9	4.4	5.5	115	20	6.4	2.5	1.9	1.3	1.1	1.6
24	1.7	7.5	4.0	5.1	54	26	5.8	2.5	2.0	1.1	1.0	1.4
25	2.1	3.5	4.0	4.5	29	31	5.9	2.4	1.9	1.2	.90	1.4
26	2.2	2.5	3.9	3.7	21	23	5.5	2.3	1.8	1.2	1.0	1.4
27	2.0	2.3	3.4	4.4	17	304	6.7	2.7	1.7	1.1	1.0	1.4
28	2.0	2.2	3.4	6.5	16	739	7.4	2.8	1.6	1.0	1.1	1.4
29	2.1	2.0	3.4	6.3	---	175	7.3	2.6	1.6	.94	1.3	1.4
30	2.3	2.2	5.3	7.6	---	100	5.6	2.5	1.5	.88	1.3	1.4
31	2.3	---	4.0	1430	---	20	---	2.8	---	.83	1.4	---
TOTAL	57.2	122.7	217.2	4215.2	1298.1	1971.1	419.1	87.0	62.4	42.44	38.49	50.0
MEAN	1.85	4.09	7.01	136	46.4	63.6	14.0	2.81	2.08	1.37	1.24	1.67
MAX	2.3	16	44	1850	403	739	60	4.7	2.9	2.9	1.6	2.2
MIN	1.3	1.5	1.7	3.1	7.4	4.3	5.5	2.2	1.5	.83	.83	1.3
AC-FT	113	243	431	8360	2570	3910	831	173	124	84	76	99

CAL YR 1978 TOTAL 29136.51 MEAN 79.8 MAX 4400 MIN .71 AC-FT 57790
WTR YR 1979 TOTAL 8580.93 MEAN 23.5 MAX 1850 MIN .83 AC-FT 17020

11044500 SANTA MARGARITA RIVER NEAR FALLBROOK, CA

LOCATION.--Lat 33°23'54", long 117°15'44", in NE¼SE¼NE¼ sec.14, T.9 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on right bank 180 ft (55 m) upstream from De Luz Road, 1.3 mi (2.1 km) northwest of Fallbrook, and 1.9 mi (3.1 km) downstream from Sandia Canyon.

DRAINAGE AREA.--644 mi² (1,668 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1924 to current year. Monthly discharge only for October and November 1924, published in WSP 1315-B.

REVISED RECORDS.--WDR CA-72-1: 1971.

GAGE.--Water-stage recorder. Concrete-road control since October 1955. Datum of gage is 267.96 ft (81.674 m) National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation). Prior to Oct. 1, 1955, at site 1.7 mi (2.7 km) upstream at different datum. Records equivalent except for extreme low flows.

REMARKS.--Records fair. Flow partly regulated since November 1948 by Vail Lake (station 11042500). Several small diversions above station for irrigation. The Fallbrook Public Utility District reports no water pumped during the current year from a well in the streambed 2.1 mi (3.4 km) upstream from the station.

AVERAGE DISCHARGE.--24 years (water years 1925-48), unregulated, 35.4 ft³/s (1.003 m³/s), 25,630 acre-ft/yr (31.6 hm³/yr); 31 years (water years 1949-79), 16.2 ft³/s (0.459 m³/s), 11,740 acre-ft/yr (14.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,100 ft³/s (937 m³/s) Feb. 16, 1927, gage height, 15.6 ft (4.75 m), site and datum then in use, from rating curve extended above 8,800 ft³/s (249 m³/s) on basis of slope-area measurement of maximum flow; no flow at times in recent years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,000 ft³/s (170 m³/s) Jan. 6, gage height, 10.96 ft (3.341 m) minimum daily, 4.7 ft³/s (0.13 m³/s) Aug. 28 and Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	5.8	7.3	34	652	116	38	26	12	7.8	7.1	4.7
2	7.0	5.7	8.3	34	270	130	29	25	11	7.7	7.0	5.1
3	7.0	5.6	7.8	33	209	73	156	24	10	7.6	7.0	5.3
4	7.0	5.6	7.5	33	178	63	171	24	10	7.7	6.6	5.3
5	7.0	5.6	8.0	101	156	46	80	24	10	7.7	6.6	5.3
6	7.0	5.6	8.5	2030	112	37	64	23	10	7.7	6.6	5.5
7	7.0	5.6	8.5	182	104	33	55	23	11	7.5	6.6	5.7
8	7.0	5.7	8.0	79	78	32	52	23	10	7.7	6.4	5.7
9	7.0	6.0	8.5	54	64	31	48	21	9.4	7.7	6.4	6.0
10	7.0	9.0	9.0	47	57	30	46	20	8.2	7.5	6.4	6.2
11	7.0	22	8.8	37	55	29	44	19	8.0	7.5	6.0	6.2
12	7.0	19	8.8	28	52	29	42	18	7.7	7.7	5.9	6.4
13	7.0	12	8.5	24	50	29	41	17	7.7	7.6	5.9	6.6
14	6.8	12	8.8	23	52	28	39	16	7.9	7.5	5.9	6.6
15	6.8	13	8.8	122	47	29	38	15	7.7	7.5	5.9	6.6
16	6.8	7.0	8.8	161	45	29	37	16	7.7	7.7	5.7	6.8
17	6.8	6.8	53	71	42	42	36	16	7.6	7.6	5.7	6.6
18	6.8	6.6	83	75	42	30	34	16	7.7	7.5	5.5	6.8
19	6.6	6.4	106	69	40	250	32	16	7.7	7.5	5.5	7.0
20	6.6	8.5	66	45	40	140	30	16	7.7	7.7	5.4	7.0
21	6.6	28	50	43	216	115	29	15	7.7	7.7	5.4	7.3
22	6.6	25	46	41	168	90	29	15	7.8	7.7	5.4	7.0
23	6.6	8.8	44	39	166	72	28	14	7.7	7.5	5.4	7.3
24	6.6	9.0	42	37	152	60	27	14	7.7	7.7	5.4	7.3
25	6.4	9.8	40	35	92	52	39	13	7.7	7.7	5.4	7.5
26	6.4	8.0	40	33	69	47	42	13	8.0	7.7	5.4	7.5
27	6.2	7.5	39	30	55	388	39	13	7.8	7.7	4.9	7.3
28	6.1	7.0	38	28	54	1030	36	13	7.7	7.5	4.7	7.5
29	6.1	6.8	37	26	---	644	31	13	7.7	7.3	5.1	7.7
30	6.1	7.0	36	25	---	219	27	13	8.0	7.2	4.9	7.7
31	6.0	---	35	1210	---	200	---	12	---	7.2	4.9	---
TOTAL	207.9	290.4	888.9	4829	3317	4143	1439	546	256.8	235.3	181.0	195.5
MEAN	6.71	9.68	28.7	156	118	134	48.0	17.6	8.56	7.59	5.84	6.52
MAX	7.0	28	106	2030	652	1030	171	26	12	7.8	7.1	7.7
MIN	6.0	5.6	7.3	23	40	28	27	12	7.6	7.2	4.7	4.7
AC-FT	412	576	1760	9580	6580	8220	2850	1080	509	467	359	388

CAL YR 1978 TOTAL 45542.9 MEAN 125 MAX 5400 MIN 3.5 AC-FT 90330
WTR YR 1979 TOTAL 16529.8 MEAN 45.3 MAX 2030 MIN 4.7 AC-FT 32790

11044500 SANTA MARGARITA RIVER NEAR FALLBROOK, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: Water years 1967 to current year.

COOPERATION.--Chemical-quality records were furnished by California Department of Water Resources.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	HARD-NESS (MG/L AS CACO3)
OCT 18...	1145	6.8	--	--	21.0	--	--	13	.3	--
DEC 14...	1630	8.8	1170	8.5	12.0	10	10.1	--	--	440
MAR 23...	2130	E72	780	8.5	10.0	55	10.3	--	--	260
MAY 22...	1405	15	--	--	26.0	--	--	17	.7	--
JUN 23...	1150	7.8	1010	8.1	28.0	6	7.4	--	--	370

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 18...	--	--	--	--	--	--	--	--	--	--
DEC 14...	100	45	110	35	2.3	3.0	270	170	160	.4
MAR 23...	63	26	78	39	2.1	5.0	170	110	110	.4
MAY 22...	--	--	--	--	--	--	--	--	--	--
JUN 23...	87	37	100	37	2.3	2.0	240	150	140	.5

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT 18...	--	6	--	--	--	--	--	--	--	--
DEC 14...	776	--	.68	3.0	<.01	--	.00	.57	.260	.10
MAR 23...	545	--	1.4	6.2	.03	.10	.00	.99	.580	.19
MAY 22...	--	42	--	--	--	--	--	--	--	--
JUN 23...	689	--	.54	1.6	<.01	--	.00	.48	.190	.06

E Estimated

< Actual value is known to be less than the value shown.

11044500 SANTA MARGARITA RIVER NEAR FALLBROOK, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)
OCT 18...	1145	0	100	--	0	0	10	20	0	70	.0	0
DEC 14...	1630	--	--	200	--	--	--	--	--	--	--	--
MAR 23...	2130	--	--	100	--	--	--	--	--	--	--	--
MAY 22...	1405	0	100	--	10	0	0	10	0	40	.0	0
JUN 23...	1150	--	--	100	--	--	--	--	--	--	--	--

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
OCT 18...	1145	5.8	.26
MAY 22...	1405	5.1	.50

11046000 SANTA MARGARITA RIVER AT YSIDORA, CA

LOCATION.--Lat 33°14'13", long 117°23'14", in NE¼SW¼NE¼ sec.10, T.11 S., R.5 W., San Diego County, Hydrologic Unit 18070302, on Camp Joseph H. Pendleton Naval Reservation, on left bank 1.7 mi (2.7 km) upstream from mouth at Pacific Ocean, and 2.0 mi (3.2 km) southwest of Ysidora.

DRAINAGE AREA.--740 mi^2 (1,917 km^2).

PERIOD OF RECORD.--February 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5.00 ft (1.524 m) below National Geodetic Vertical Datum of 1929 (U.S. Navy reference mark). See WSP 1735 for history of changes prior to Nov. 27, 1935. Nov. 27, 1935, to Feb. 25, 1970, at site 0.8 mi (1.3 km) upstream at different datum.

REMARKS.--Records poor. No stage-discharge relationship during year. Flow partly regulated by Vail Lake since November 1948 (station 11042500). Diversions for irrigation on Rancho California (formerly Santa Margarita Ranch and Pauba Ranch). Large conservation pools, starting 0.5 mi (0.8 km) upstream can detain flow. AVERAGE DISCHARGE represents flow to ocean during period of record, regardless of upstream development.

AVERAGE DISCHARGE.--56 years, 29.7 ft^3/s (0.841 m^3/s), 21,520 acre-ft/yr (26.5 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,600 ft^3/s (952 m^3/s) Feb. 16, 1927, gage height, 18.00 ft (5.486 m), site and datum then in use, on basis of slope-area measurement of maximum flow; maximum gage height, 18.12 (5.523 m) Mar. 1, 1978; no flow for all or part of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,500 ft^3/s (156 m^3/s) estimated, Jan. 6, gage height, 13.90 ft (4.237 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	34	1300	240	72	52	19	7.0		
2			0	33	580	270	108	46	18	6.6		
3			0	33	440	150	330	43	18	6.4		
4			0	33	360	105	350	40	18	6.1		
5			0	220	300	84	180	38	17	6.0		
6			0	2300	260	78	160	36	16	5.8		
7			0	200	240	70	140	35	16	5.3		
8			0	110	200	66	125	33	15	4.9		
9			0	65	180	62	115	32	15	4.7		
10			0	53	160	59	108	31	14	4.3		
11			0	44	145	56	100	30	13	4.0		
12			0	39	132	54	98	29	13	3.9		
13			0	38	124	53	94	28	12	3.6		
14			0	50	117	52	89	27	12	3.4		
15			0	220	108	52	86	27	12	3.2		
16			2.0	240	102	52	81	26	11	3.0		
17			60	180	97	54	77	25	11	2.7		
18			100	130	94	60	73	24	10	2.6		
19			130	110	92	280	70	24	10	2.4		
20			75	100	90	150	65	23	9.8	2.3		
21			62	92	490	120	63	23	9.6	2.1		
22			53	84	360	95	60	22	9.2	1.9		
23			49	76	355	86	57	22	8.9	1.6		
24			46	70	300	80	56	22	8.6	1.3		
25			44	66	180	75	78	21	8.4	.90		
26			41	62	160	72	88	21	8.2	.60		
27			38	59	135	630	78	21	7.8	.40		
28			36	56	122	1220	70	20	7.6	.20		
29			35	54	---	580	65	20	7.4	0		
30			34	52	---	220	59	19	7.2	0		
31		---	34	2600	---	82	---	19	---	0		---
TOTAL	0	0	839.0	7503	7223	5307	3195	879	362.7	97.20	0	0
MEAN	0	0	27.1	242	258	171	107	28.4	12.1	3.14	0	0
MAX	0	0	130	2600	1300	1220	350	52	19	7.0	0	0
MIN	0	0	0	33	90	52	56	19	7.2	0	0	0
AC-FT	0	0	1660	14880	14330	10530	6340	1740	719	193	0	0

CAL YR 1978 TOTAL 80067.07 MEAN 219 MAX 9060 MIN 0 AC-FT 158800
WTR YR 1979 TOTAL 25405.90 MEAN 69.6 MAX 2600 MIN 0 AC-FT 50390

11046100 LAS FLORES CREEK NEAR OCEANSIDE, CA

LOCATION.--Lat 33°17'32", long 117°27'21", in NW¼SE¼ sec.24, T.10 S., R.6 W., San Diego County, Hydrologic Unit 18070301, Camp Joseph H. Pendleton Naval Reservation, on upstream side and at center of bridge on Atchison, Topeka, and Santa Fe Railway, 0.5 mi (0.8 km) upstream from mouth, and 8.5 mi (13.7 km) northwest of Oceanside.

DRAINAGE AREA.--26.6 mi² (68.9 km²).

PERIOD OF RECORD.--May 1951 to September 1967, October 1969 to September 1979 (discontinued).

REVISED RECORDS.--WDR CA-72: 1971.

GAGE.--Water-stage recorder and multiple concrete culvert control. Altitude of gage is 35 ft (11 m), from topographic map.

REMARKS.--Records fair. No regulation above station. Some pumping above station for irrigation.

AVERAGE DISCHARGE.--26 years, 1.26 ft³/s (0.036 m³/s), 913 acre-ft/yr (1.13 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,300 ft³/s (207 m³/s) Mar. 1, 1978, gage height, 13.5 ft (4.11 m), estimated, from floodmarks, based on culvert computation of peak flow; no flow for long periods in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 25, 1969, reached a stage of 7.25 ft (2.210 m), from floodmarks, discharge, 4,200 ft³/s (119 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,170 ft³/s (33.1 m³/s) Jan. 31, gage height, 3.66 ft (1.116 m), from rating curve extended above 500 ft³/s (14.2 m³/s) on basis of culvert computation of peak flow; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.01	.01	43	11	11	.29	.06	.03	2.3	.13
2		0	.01	.01	38	6.3	9.3	.39	.06	.04	2.2	.17
3		0	.01	.01	23	2.7	8.0	.27	.06	.03	1.4	.17
4		0	0	.01	10	2.4	6.8	.22	.06	.02	.90	.21
5		0	.01	6.4	6.7	1.9	6.0	.84	.06	.02	.39	.31
6		0	.01	48	5.4	1.5	5.3	.80	.06	.02	.11	.43
7		0	0	15	4.6	1.3	4.8	.76	.06	.02	.08	.31
8		0	0	7.0	3.5	1.2	4.1	.56	.06	.03	.07	.93
9		0	0	1.7	3.0	1.1	3.8	.18	.06	.02	.06	1.5
10		0	0	.70	2.8	.85	5.3	.13	.06	.02	.06	1.5
11		0	0	.03	2.5	.73	4.0	.13	.05	.02	.08	1.3
12		0	0	.01	2.2	1.3	3.4	.22	.05	.02	.08	1.3
13		1.3	0	.01	2.0	1.2	2.9	.08	.05	.02	.07	1.9
14		.91	0	.01	4.2	1.2	2.5	.09	.05	.03	.09	1.7
15		.01	0	12	3.6	.87	2.2	.09	.05	.02	.07	1.3
16		0	.01	6.6	1.9	1.5	1.8	.09	.05	.02	.08	1.3
17		0	.54	1.4	1.6	14	1.3	.11	.05	.02	.08	1.2
18		0	2.3	9.4	1.6	3.3	1.4	.09	.05	.02	.09	1.2
19		0	.84	5.8	1.6	26	1.4	.08	.06	.12	.11	.93
20		0	.02	2.1	1.6	22	1.0	.08	.06	.14	.12	.37
21		.95	.01	1.5	20	29	1.2	.08	.06	.01	.13	.17
22		.45	.01	1.1	4.8	9.7	.94	.08	.04	.02	.13	.13
23		.01	.01	.93	31	6.0	.77	.08	.04	.02	.16	.11
24		.01	.01	.97	8.4	4.4	.68	.08	.04	.02	.19	.08
25		.01	.01	.97	6.1	4.1	.74	.08	.05	.03	.22	.08
26		.01	.01	.93	4.8	3.6	.60	.07	.05	.63	.43	.07
27		.01	.01	.90	3.2	40	.31	.06	.05	1.7	.96	.07
28		.01	.01	.90	2.6	65	.40	.06	.11	1.6	.15	.07
29		.01	.01	.85	---	23	.07	.06	.16	1.9	.15	.07
30		.01	.01	.89	---	16	.11	.06	.03	2.2	.15	.07
31		---	.01	187	---	13	---	.06	---	2.0	.15	---
TOTAL	0	3.70	3.87	313.14	243.7	316.15	92.12	6.27	1.75	10.81	11.26	19.08
MEAN	0	.12	.12	10.1	8.70	10.2	3.07	.20	.058	.35	.36	.64
MAX	0	1.3	2.3	187	43	65	11	.84	.16	2.2	2.3	1.9
MIN	0	0	0	.01	1.6	.73	.07	.06	.03	.01	.06	.07
AC-FT	0	7.3	7.7	621	483	627	183	12	3.5	21	22	38

CAL YR 1978 TOTAL 6553.83 MEAN 18.0 MAX 927 MIN 0 AC-FT 13000
WTR YR 1979 TOTAL 1021.85 MEAN 2.80 MAX 187 MIN 0 AC-FT 2030

11046550 SAN JUAN CREEK AT SAN JUAN CAPISTRANO, CA

LOCATION.--Lat 33°29'30", long 117°39'44", in SW¼SE¼NE¼ sec.12, T.8 S., R.8 W., Orange County, Hydrologic Unit 18070301, on left bank at Camino Capistrano bridge, 0.2 mi (0.3 km) upstream from Arroyo Trabuco, and 0.6 mi (1.0 km) south of San Juan Capistrano.

DRAINAGE AREA.--117 mi^2 (303 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 67 ft (20 m), from topographic map. Prior to Jan. 10, 1979, at datum 10.00 ft (3.048 m) higher.

REMARKS.--Records fair. No regulation above station. Capistrano Water Co. diverts 3.0 mi (4.8 km) upstream. Various amounts of diverted water reach station as irrigation return flow and rising ground water. Data for San Juan Creek near San Juan Capistrano (station 11046500) previously collected at site 2.8 mi (4.5 km) upstream was published as creek only and combined.

COOPERATION.--Nine discharge measurements were furnished by Orange County Environmental Management Agency.

AVERAGE DISCHARGE.--10 years, 15.6 ft^3/s (0.442 m^3/s), 11,300 acre-ft/yr (13.9 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,700 ft^3/s (416 m^3/s), estimated, Mar. 4, 1978, gage height, 7.0 ft (2.13 m), from floodmarks, on basis of slope-conveyance study; no flow at times in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 25, 1969, 22,400 ft^3/s (634 m^3/s), at site 2.8 mi (4.5 km) upstream, as station 11046500.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft^3/s (5.66 m^3/s) and maximum (*), from rating extended above 400 ft^3/s (11.3 m^3/s):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)	Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Nov. 21	1600	398	11.3	2.03	0.619	Mar. 1	1100	374	10.6	10.50	3.200
Jan. 6	0300	1,290	36.5	2.25	0.686	Mar. 21	0600	*2,060	58.3	11.85	3.612
Jan. 31	1200	1,000	28.3	11.60	3.536	Mar. 27	2230	1,320	37.4	11.45	3.490
Feb. 23	0600	308	8.72	10.45	3.185						

Minimum daily discharge, 0.90 ft^3/s (0.025 m^3/s) Aug. 26-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	3.1	6.2	5.5	391	152	159	34	12	1.7	1.1	1.0
2	3.6	2.9	5.2	5.2	263	118	145	34	12	1.5	1.1	1.0
3	3.6	2.7	5.2	5.2	194	80	128	32	12	1.5	1.1	1.0
4	3.6	2.5	5.2	4.6	141	73	112	30	12	1.5	1.1	1.0
5	3.3	2.5	5.2	146	121	62	112	28	11	1.4	1.1	1.0
6	2.5	2.5	4.9	610	90	52	93	26	11	1.4	1.1	1.1
7	2.2	2.3	4.3	166	69	48	86	26	11	1.3	1.1	1.1
8	2.0	2.2	4.0	63	58	48	78	25	11	1.3	1.1	1.1
9	2.3	2.2	4.0	22	48	45	73	25	9.0	1.4	1.1	1.1
10	2.3	2.3	3.8	15	39	40	67	24	8.0	1.4	1.1	1.1
11	2.3	3.1	3.6	14	34	36	64	23	7.2	1.3	1.1	1.1
12	2.5	3.6	3.6	12	30	33	60	22	6.3	1.3	1.1	1.1
13	2.5	17	3.3	11	28	31	58	21	5.8	1.3	1.2	1.1
14	2.3	7.0	3.3	11	41	48	54	20	5.4	1.3	1.2	1.1
15	2.2	4.6	3.3	17	35	45	54	20	5.0	1.3	1.3	1.0
16	2.3	3.3	3.1	16	30	40	52	19	4.4	1.3	1.3	1.0
17	2.3	3.1	33	15	26	64	48	19	4.0	1.3	1.3	1.0
18	2.3	2.9	40	37	23	54	48	17	3.6	1.3	1.2	1.0
19	2.5	2.9	30	20	21	128	48	17	3.2	1.3	1.1	1.0
20	2.5	3.1	12	20	20	134	48	15	2.8	1.3	1.0	1.0
21	2.5	55	8.7	18	114	334	46	15	2.5	1.2	1.0	1.1
22	3.1	10	7.8	22	103	145	46	15	2.4	1.2	1.0	1.1
23	3.3	7.8	7.0	18	181	128	42	14	2.3	1.2	1.0	1.1
24	2.7	7.8	7.0	15	106	112	38	13	2.2	1.2	1.0	1.1
25	2.7	7.4	7.0	14	86	112	36	13	2.1	1.2	1.0	1.1
26	2.2	6.6	6.6	11	69	106	36	13	2.1	1.1	.90	1.1
27	2.2	6.6	5.9	11	62	516	33	12	1.9	1.1	.90	1.1
28	2.7	5.9	5.9	14	58	874	33	12	1.9	1.1	.90	1.1
29	2.5	5.5	5.9	14	---	465	36	12	1.9	1.1	.90	1.1
30	2.3	6.2	5.5	50	---	262	34	13	1.7	1.1	.90	1.1
31	2.7	---	5.9	638	---	194	---	13	---	1.1	1.0	---
TOTAL	81.6	194.6	256.4	2040.5	2481	4579	1967	622	177.7	40.0	33.30	31.9
MEAN	2.63	6.49	8.27	65.8	88.6	148	65.6	20.1	5.92	1.29	1.07	1.06
MAX	3.6	55	40	638	391	874	159	34	12	1.7	1.3	1.1
MIN	2.0	2.2	3.1	4.6	20	31	33	12	1.7	1.1	.90	1.0
AC-FT	162	386	509	4050	4920	9080	3900	1230	352	79	66	63

CAL YR 1978 TOTAL 6643.60 MEAN 18.2 MAX 353 MIN 0 AC-FT 13180
WTR YR 1979 TOTAL 12505.00 MEAN 34.3 MAX 874 MIN .90 AC-FT 24800

11046550 SAN JUAN CREEK AT SAN JUAN CAPISTRANO, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1970 to current year.
SEDIMENT RECORDS: October 1970 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 13,300 mg/L Mar. 4, 1978; minimum daily mean, no flow for many days in 1970-72.
SEDIMENT DISCHARGE: Maximum daily, 331,000 tons (300,000 metric tons) Mar. 4, 1978; minimum daily, 0 tons on many days during most years.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 6,070 mg/L Jan. 31; minimum daily mean, 6 mg/L May 29.
SEDIMENT DISCHARGE: Maximum daily, 10,800 tons (9,800 metric tons), Jan. 31; minimum daily, 0.08 tons (0.07 metric tons) June 24.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	18.0	---	---	11.5	13.0	13.5	---	---	20.0	---	
2	---	---	---	---	10.5	8.0	---	---	---	---	---	
3	---	---	9.0	---	---	9.0	12.0	---	17.0	---	---	
4	---	---	---	---	---	12.0	---	---	---	---	---	
5	---	---	---	13.5	---	---	---	---	---	---	17.0	
6	---	24.0	---	13.0	---	12.0	21.0	17.0	---	---	---	
7	---	---	---	13.0	---	---	---	---	---	---	---	
8	19.0	---	---	15.0	17.0	---	16.5	---	---	---	---	
9	---	---	---	---	---	15.0	---	---	---	---	---	
10	---	15.0	7.0	19.5	---	---	---	---	21.0	17.5	---	
11	---	---	---	10.0	---	---	---	---	---	---	---	
12	---	---	---	---	---	16.0	12.5	---	---	---	---	
13	18.5	---	11.0	10.0	---	20.5	---	19.5	---	---	---	
14	---	11.0	---	---	---	13.0	---	---	---	---	---	
15	16.0	---	---	12.0	---	---	---	---	---	---	---	
16	---	---	9.5	---	---	13.0	16.5	---	---	---	---	
17	---	---	12.5	12.5	---	13.0	---	---	16.0	18.0	---	
18	---	---	---	---	---	13.5	12.5	---	---	---	---	
19	---	13.0	10.0	---	12.5	---	---	---	---	---	---	
20	18.0	---	12.5	---	---	9.0	---	---	---	---	---	
21	---	---	15.0	9.5	12.0	11.0	---	21.0	---	---	---	
22	---	11.5	---	---	11.5	17.0	---	---	---	---	---	
23	---	15.0	17.0	---	14.5	18.0	24.0	---	---	19.0	---	
24	---	---	---	9.5	9.0	---	---	---	19.0	---	---	
25	---	---	---	---	14.0	---	---	---	---	---	---	
26	16.0	12.0	---	---	11.0	15.0	---	---	---	---	---	
27	---	17.0	---	---	9.0	14.0	---	19.0	---	---	---	
28	---	---	15.0	---	17.0	14.0	---	---	---	---	---	
29	---	---	---	---	---	17.5	16.5	20.5	---	---	---	
30	---	10.0	---	---	---	10.0	---	---	---	---	---	
31	---	---	---	12.0	---	---	---	---	---	18.0	---	
MONTH	---	---	---	---	---	---	---	---	---	---	---	

11046550 SAN JUAN CREEK AT SAN JUAN CAPISTRANO, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.6	25	.24	3.1	318	2.7	6.2	75	1.3
2	3.6	30	.29	2.9	300	2.3	5.2	60	.84
3	3.6	30	.29	2.7	255	1.9	5.2	50	.70
4	3.6	40	.39	2.5	190	1.3	5.2	50	.70
5	3.3	40	.36	2.5	125	.84	5.2	50	.70
6	2.5	50	.34	2.5	103	.70	4.9	50	.66
7	2.2	55	.33	2.3	110	.68	4.3	50	.58
8	2.0	58	.31	2.2	135	.80	4.0	55	.59
9	2.3	60	.37	2.2	160	.95	4.0	70	.76
10	2.3	60	.37	2.3	178	1.1	3.8	85	.87
11	2.3	70	.43	3.1	185	1.5	3.6	55	.53
12	2.5	80	.54	3.6	180	1.7	3.6	35	.34
13	2.5	85	.57	17	273	27	3.3	30	.27
14	2.3	90	.56	7.0	216	4.1	3.3	45	.40
15	2.2	94	.56	4.6	165	2.0	3.3	70	.62
16	2.3	90	.56	3.3	145	1.3	3.1	85	.71
17	2.3	70	.43	3.1	130	1.1	33	245	60
18	2.3	60	.37	2.9	120	.94	40	444	57
19	2.5	50	.34	2.9	115	.90	30	493	41
20	2.5	44	.30	3.1	110	.92	12	255	8.3
21	2.5	40	.27	55	565	208	8.7	118	2.8
22	3.1	40	.33	10	256	6.9	7.8	70	1.5
23	3.3	219	1.8	7.8	120	2.5	7.0	55	1.0
24	2.7	315	2.3	7.8	100	2.1	7.0	50	.95
25	2.7	300	2.2	7.4	95	1.9	7.0	50	.95
26	2.2	295	1.8	6.6	85	1.5	6.6	50	.89
27	2.2	295	1.8	6.6	45	.80	5.9	50	.80
28	2.7	295	2.2	5.9	45	.72	5.9	45	.72
29	2.5	295	2.0	5.5	60	.89	5.9	40	.64
30	2.3	300	1.9	6.2	75	1.3	5.5	40	.59
31	2.7	310	2.3	---	---	---	5.9	40	.64
TOTAL	81.6	---	26.85	194.6	---	281.34	256.4	---	188.35

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5.5	40	.59	391	2800	3420	152	1070	737
2	5.2	35	.49	263	1600	1210	118	400	127
3	5.2	35	.49	194	630	330	80	222	48
4	4.6	30	.37	141	390	148	73	120	24
5	146	2080	1750	121	290	95	62	80	13
6	610	2090	5130	90	245	60	52	78	11
7	166	230	103	69	215	40	48	80	10
8	63	70	12	58	195	31	48	90	12
9	22	40	2.4	48	160	21	45	100	12
10	15	100	4.1	39	135	14	40	85	9.2
11	14	110	4.2	34	120	11	36	65	6.3
12	12	65	2.1	30	115	9.3	33	58	5.2
13	11	40	1.2	28	110	8.3	31	210	18
14	11	30	.89	41	105	12	48	125	16
15	17	139	8.9	35	95	9.0	45	105	13
16	16	90	3.9	30	90	7.3	40	100	11
17	15	57	2.3	26	85	6.0	64	999	206
18	37	220	41	23	77	4.8	54	530	77
19	20	120	6.5	21	70	4.0	128	780	270
20	20	161	11	20	70	3.8	134	700	253
21	18	75	3.6	114	606	209	334	3290	6500
22	22	135	11	103	380	106	145	400	157
23	18	80	3.9	181	1980	1220	128	150	52
24	15	35	1.4	106	300	86	112	100	30
25	14	30	1.1	86	150	35	112	100	30
26	11	30	.89	69	90	17	106	80	23
27	11	30	.89	62	150	25	516	3730	8980
28	14	40	1.5	58	140	22	874	2900	6840
29	14	40	1.5	---	---	---	465	1100	1380
30	50	773	482	---	---	---	262	500	354
31	638	6070	10800	---	---	---	194	320	168
TOTAL	2040.5	---	18393.21	2481	---	7164.5	4579	---	26392.7

11046550 SAN JUAN CREEK AT SAN JUAN CAPISTRANO, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	159	196	84	34	10	.92	12	10	.32
2	145	120	47	34	10	.92	12	10	.32
3	128	92	32	32	15	1.3	12	15	.49
4	112	90	27	30	15	1.2	12	15	.49
5	112	100	30	28	15	1.1	11	15	.45
6	93	108	27	26	18	1.3	11	15	.45
7	86	110	26	26	20	1.4	11	15	.45
8	78	104	22	25	20	1.4	11	15	.45
9	73	100	20	25	30	2.0	9.0	15	.36
10	67	98	18	24	40	2.6	8.0	15	.32
11	64	80	14	23	50	3.1	7.2	20	.39
12	60	55	8.9	22	60	3.6	6.3	20	.34
13	58	40	6.3	21	72	4.1	5.8	20	.31
14	54	35	5.1	20	50	2.7	5.4	25	.36
15	54	25	3.6	20	30	1.6	5.0	25	.34
16	52	24	3.4	19	20	1.0	4.4	25	.30
17	48	20	2.6	19	10	.51	4.0	27	.29
18	48	15	1.9	17	10	.46	3.6	25	.24
19	48	15	1.9	17	10	.46	3.2	25	.22
20	48	15	1.9	15	10	.41	2.8	20	.15
21	46	15	1.9	15	8	.32	2.5	20	.14
22	46	15	1.9	15	10	.41	2.4	20	.13
23	42	43	4.9	14	10	.38	2.3	15	.09
24	38	40	4.1	13	10	.35	2.2	13	.08
25	36	30	2.9	13	10	.35	2.1	15	.09
26	36	20	1.9	13	10	.35	2.1	15	.09
27	33	10	.89	12	18	.58	1.9	20	.10
28	33	10	.89	12	10	.32	1.9	20	.10
29	36	9	.87	12	6	.19	1.9	20	.10
30	34	10	.92	13	10	.35	1.7	20	.09
31	---	---	---	13	10	.35	---	---	---
TOTAL	1967	---	403.77	622	---	36.03	177.7	---	8.05

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.7	26	.12	1.1	70	.21	1.0	50	.14
2	1.5	30	.12	1.1	80	.24	1.0	50	.14
3	1.5	30	.12	1.1	80	.24	1.0	50	.14
4	1.5	30	.12	1.1	90	.27	1.0	50	.14
5	1.4	35	.13	1.1	95	.28	1.0	50	.14
6	1.4	35	.13	1.1	90	.27	1.1	50	.15
7	1.3	40	.14	1.1	90	.27	1.1	50	.15
8	1.3	40	.14	1.1	90	.27	1.1	50	.15
9	1.4	45	.17	1.1	90	.27	1.1	50	.15
10	1.4	47	.18	1.1	90	.27	1.1	50	.15
11	1.3	40	.14	1.1	80	.24	1.1	50	.15
12	1.3	35	.12	1.1	80	.24	1.1	50	.15
13	1.3	30	.11	1.2	80	.26	1.1	50	.15
14	1.3	40	.14	1.2	80	.26	1.1	50	.15
15	1.3	40	.14	1.3	80	.28	1.0	50	.14
16	1.3	50	.18	1.3	76	.27	1.0	50	.14
17	1.3	57	.20	1.3	70	.25	1.0	50	.14
18	1.3	60	.21	1.2	70	.23	1.0	50	.14
19	1.3	70	.25	1.1	70	.21	1.0	50	.14
20	1.3	80	.28	1.0	70	.19	1.0	50	.14
21	1.2	90	.29	1.0	70	.19	1.1	50	.15
22	1.2	100	.32	1.0	60	.16	1.1	50	.15
23	1.2	110	.36	1.0	60	.16	1.1	50	.15
24	1.2	100	.32	1.0	60	.16	1.1	50	.15
25	1.2	90	.29	1.0	60	.16	1.1	50	.15
26	1.1	80	.24	.90	60	.15	1.1	50	.15
27	1.1	80	.24	.90	60	.15	1.1	50	.15
28	1.1	70	.21	.90	60	.15	1.1	60	.18
29	1.1	70	.21	.90	59	.14	1.1	70	.21
30	1.1	64	.19	.90	55	.13	1.1	70	.21
31	1.1	70	.21	1.0	50	.14	---	---	---
TOTAL	40.0	---	6.02	33.30	---	6.71	31.9	---	4.54
YEAR	12505.00		52912.07						

11046550 SAN JUAN CREEK AT SAN JUAN CAPISTRANO, CA--Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1978	81.60	26.85	5	32
NOVEMBER ...	194.60	281.34	31	312
DECEMBER ...	256.40	188.35	39	227
JANUARY 1979	2040.50	18393.21	13700	32100
FEBRUARY ...	2481.00	7164.50	8390	15600
MARCH	4579.00	26392.70	26800	53200
APRIL	1967.00	403.77	2130	2540
MAY	622.00	36.03	113	149
JUNE	177.70	8.05	21	29
JULY	40.00	6.02	1	7
AUGUST	33.30	6.71	0	7
SEPTEMBER ..	31.90	4.54	0	5
TOTAL	12505.00	52912.07	51230	104208

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
JAN								
05...	1415	13.5	41	1540	170	--	76	87
31...	1615	12.0	760	3170	6510	--	44	61
FEB								
02...	1415	10.5	223	1190	716	--	29	38
23...	1150	14.5	185	2610	1300	--	48	56
MAR								
02...	0700	8.0	128	503	174	31	36	41
13...	1140	20.5	31	275	23	42	50	58

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
JAN							
05...	95	99	100	--	--	--	--
31...	69	81	90	98	99	100	--
FEB							
02...	42	48	54	61	78	97	100
23...	61	68	75	82	92	99	100
MAR							
02...	48	62	74	92	99	100	--
13...	66	71	74	77	84	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	NUMBER OF SAMPLING POINTS	STREAMFLOW, INSTANTANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
SEP							
27...	0955	5	1.1	1	3	7	22

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
SEP							
27...	45	60	68	75	84	90	98

11047200 OSO CREEK AT CROWN VALLEY PARKWAY, NEAR MISSION VIEJO, CA

LOCATION.--Lat 33°33'29", long 117°40'33", in SE¼ sec.14, T.7 S., R.8 W., Orange County, Hydrologic Unit 18070301, on right upstream side of Crown Valley Parkway bridge, 2.7 mi (4.3 km) south of Mission Viejo, and 4.0 mi (6.4 km) north of San Juan Capistrano.

DRAINAGE AREA.--14.0 mi² (36.3 km²).

PERIOD OF RECORD.--December 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 250 ft (76 m), from topographic map.

REMARKS.--Records good except those above 200 cfs (5.66 m³/s), which are poor. No regulation or diversion above station.

COOPERATION.--Records were furnished by Orange County Environmental Management Agency.

AVERAGE DISCHARGE.--9 years (water years 1971-79), 4.21 ft³/s (0.119 m³/s), 3,050 acre-ft/yr (3.76 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,445 ft³/s (69.2 m³/s) Jan. 5, 1979, gage height, 6.60 ft (2.012 m); maximum gage height, 7.67 ft (2.338 m) Feb. 11, 1973 (backwater from channel growth); no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,445 ft³/s (69.2 m³/s) Jan. 5, gage height, 6.60 ft (2.012 m); minimum daily, 1.6 ft³/s (0.045 m³/s) several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.8	2.4	1.6	56	24	3.1	2.6	3.1	5.0	2.2	1.8
2	2.2	1.8	2.3	1.6	122	2.8	2.7	2.7	2.6	4.7	2.1	1.6
3	2.3	2.1	1.8	1.7	10	2.4	2.8	2.8	2.6	3.4	1.8	1.7
4	2.8	2.2	1.7	2.0	4.4	2.3	3.8	2.8	2.6	3.4	2.1	2.0
5	2.3	2.2	2.1	438	3.4	2.3	3.1	2.7	2.6	3.1	1.7	2.2
6	2.6	2.4	1.8	164	2.6	2.4	3.1	2.7	2.8	3.8	1.7	2.3
7	2.6	2.6	1.7	18	2.6	2.4	3.1	2.4	2.8	4.1	2.0	2.2
8	3.1	2.4	1.7	4.7	2.3	2.3	2.7	2.8	2.8	3.1	2.3	2.7
9	3.4	2.4	1.8	15	2.4	2.4	3.4	2.4	2.6	3.4	2.4	2.1
10	2.3	4.1	2.1	9.2	2.4	2.3	3.1	2.4	2.4	4.1	2.4	2.3
11	2.6	14	2.1	4.7	2.2	2.3	3.4	2.6	2.8	4.4	2.4	2.7
12	3.1	15	2.1	3.4	2.2	2.2	2.8	2.7	3.1	4.4	2.1	2.3
13	2.6	12	2.1	2.4	2.2	2.3	3.1	2.7	3.8	4.4	2.2	2.3
14	2.4	7.5	2.1	5.7	28	2.1	3.1	2.8	3.8	3.4	2.3	2.4
15	2.3	2.1	2.2	9.6	2.3	2.1	2.8	3.1	3.4	2.8	3.4	2.4
16	2.4	2.2	2.6	4.1	2.3	2.1	2.8	3.4	3.8	2.8	2.8	2.3
17	2.7	1.7	78	1.8	2.3	81	2.7	2.8	3.4	2.7	2.8	2.6
18	2.6	1.7	31	15	2.0	13	2.7	3.1	3.8	2.6	2.8	2.4
19	2.3	1.7	28	3.4	2.4	157	2.7	3.4	4.7	2.7	2.0	2.3
20	2.2	1.8	2.3	2.6	2.3	129	2.8	2.7	4.1	2.8	2.2	2.8
21	2.2	19	2.1	2.4	101	47	3.1	3.1	4.7	3.1	2.4	2.7
22	2.1	6.0	2.0	2.3	6.4	2.7	2.8	2.8	5.0	2.7	2.1	2.7
23	2.0	2.3	2.0	4.4	146	2.4	2.8	2.7	5.0	3.4	1.8	2.4
24	2.2	2.0	1.6	3.4	4.7	2.4	2.8	2.7	4.4	3.8	2.0	2.4
25	2.3	1.8	1.8	2.6	2.7	2.4	2.8	2.8	5.0	3.8	1.8	2.4
26	2.3	1.8	1.6	2.6	3.1	2.6	2.8	2.8	5.4	3.4	1.6	2.4
27	2.2	1.8	1.7	2.8	2.6	324	2.7	2.7	5.0	4.1	2.0	2.4
28	2.2	1.8	1.6	2.8	2.4	110	3.1	2.7	4.4	3.8	1.8	2.4
29	2.1	1.8	1.8	4.4	---	31	2.6	2.7	4.7	2.6	1.7	2.4
30	2.2	1.8	1.6	164	---	8.4	2.7	2.8	3.4	2.6	1.8	2.2
31	2.0	---	1.6	202	---	5.7	---	3.1	---	2.6	1.8	---
TOTAL	74.6	123.8	183.3	1102.2	525.2	977.3	88.0	86.5	110.6	107.0	66.5	69.6
MEAN	2.41	4.13	5.91	35.6	18.8	31.5	2.93	2.79	3.69	3.45	2.15	2.33
MAX	3.4	19	78	438	146	324	3.8	3.4	5.4	5.0	3.4	2.8
MIN	2.0	1.7	1.6	1.6	2.0	2.1	2.6	2.4	2.4	2.6	1.6	1.6
AC-FT	148	246	364	2190	1040	1940	175	172	219	212	132	138

CAL YR 1978 TOTAL 4015.8 MEAN 11.0 MAX 416 MIN 1.3 AC-FT 7970
WTR YR 1979 TOTAL 3514.8 MEAN 9.63 MAX 438 MIN 1.6 AC-FT 6970

11047500 ALISO CREEK AT EL TORO, CA

LOCATION.--Lat 33°37'33", long 117°41'08", in Canada de los Alisos Grant, Orange County, Hydrologic Unit 18070301, on right bank 500 ft (150 m) downstream from Second Street Bridge at El Toro. Prior to Nov. 18, 1975 at site 500 ft (150 m) upstream.

DRAINAGE AREA.--7.91 mi² (20.5 km²).

PERIOD OF RECORD.--October 1930 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 425 ft (130 m), from topographic map. Prior to July 1962, at different datum. July 1962 to Nov. 18, 1975, water-stage recorder at site 500 ft (150 m) upstream at different datum.

REMARKS.--Records poor. No regulation or diversion above station; some pumping from wells along stream. At times since 1964, Metropolitan Water District has wasted water to creek.

COOPERATION.--Records were furnished by Orange County Environmental Management Agency.

AVERAGE DISCHARGE.--49 years, 0.76 ft³/s (0.022 m³/s), 551 acre-ft/yr (679,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,500 ft³/s (70.8 m³/s) Feb. 24, 1969, gage height, 11.00 ft (3.353 m) from floodmark, site and datum then in use, from rating curve extended above 220 ft³/s (6.23 m³/s) on basis of slope-area measurement of maximum flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,450 ft³/s (69.4 m³/s) Jan. 5, gage height, 6.60 ft (2.012 m); minimum daily, 0.10 ft³/s (0.003 m³/s) many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.10	.20	.10	20	10	4.0	.60	1.5	.40	.10	.60
2	.10	.10	.10	.10	41	1.5	3.4	.90	.90	.40	.30	.60
3	.10	.10	.10	.10	6.9	1.2	2.9	.90	.40	.30	.10	.40
4	.10	.10	.10	.10	2.1	.90	2.5	.90	.60	.20	.10	.90
5	.10	.10	.10	122	1.2	.70	2.5	.60	.60	.40	.10	.90
6	.10	.10	.10	38	1.2	.90	2.1	.60	.60	.40	.30	1.2
7	.10	.10	.10	.30	1.2	.90	1.8	.40	.60	.10	.60	1.5
8	.10	.10	.10	.30	.60	.90	1.5	.30	.90	.10	.90	1.5
9	.10	.10	.10	1.2	.60	.40	1.2	.20	.60	.10	.90	.60
10	.10	2.0	.10	.60	.60	.40	.60	.10	.40	.10	.90	1.8
11	.10	6.9	.10	1.5	.40	.60	.30	.30	.40	.10	.40	1.8
12	.10	.50	.10	1.8	.50	.50	.10	.30	.60	.10	.60	1.8
13	.10	6.7	.10	1.2	.40	14	.30	.40	.40	.10	.90	2.9
14	.10	.10	.10	6.2	2.5	12	.40	.60	.30	.10	1.2	2.1
15	.10	.10	.10	13	.90	9.0	.60	.90	.60	.10	1.2	2.1
16	.10	.10	.70	7.4	.90	.50	.90	1.2	.40	.10	.90	.90
17	.10	.10	18	1.5	.90	12	1.2	1.5	.30	.30	1.2	2.5
18	.10	.10	7.3	9.4	.90	1.5	1.4	1.5	.40	.30	1.2	2.5
19	.10	.10	4.7	.90	.90	36	1.5	1.5	.40	.60	.90	2.1
20	.10	.10	.40	.40	1.7	30	1.4	1.2	.40	.60	1.2	2.5
21	.10	.10	.40	.40	17	15	1.2	1.2	.40	1.8	1.5	2.5
22	.10	35	.30	.40	1.5	7.4	.90	1.2	.30	2.1	.90	.90
23	.10	.10	.20	.40	26	2.5	.60	.90	.20	2.9	.90	.60
24	.10	.10	.10	.40	2.1	1.8	.40	.90	.20	2.9	.40	3.4
25	.10	.10	.10	.40	1.2	1.5	.30	1.5	.20	2.5	.60	1.5
26	.10	.10	.10	.30	1.2	1.5	.10	1.5	.10	1.5	.40	.40
27	.10	.10	.10	.40	.90	72	.10	1.2	.90	.30	.90	1.2
28	.10	.10	.10	.50	.90	53	.10	1.2	.40	.30	.90	.90
29	.10	.10	.10	.30	---	23	.30	1.0	.30	.10	.40	.90
30	.10	.10	.10	22	---	8.0	.40	1.0	.30	.10	.40	.60
31	.10	---	.10	47	---	6.3	---	.90	---	.10	.60	---
TOTAL	3.10	53.60	34.40	278.60	136.20	325.90	35.00	27.40	14.60	19.50	21.90	44.10
MEAN	.10	1.79	1.11	8.99	4.86	10.5	1.17	.88	.49	.63	.71	1.47
MAX	.10	35	18	122	41	72	4.0	1.5	1.5	2.9	1.5	3.4
MIN	.10	.10	.10	.10	.40	.40	.10	.10	.10	.10	.10	.40
AC-FT	6.1	106	68	553	270	646	69	54	29	39	43	87

CAL YR 1978 TOTAL 693.10 MEAN 1.90 MAX 84 MIN 0 AC-FT 1370
WTR YR 1979 TOTAL 994.30 MEAN 2.72 MAX 122 MIN .10 AC-FT 1970

11048500 SAN DIEGO CREEK AT SAND CANYON AVENUE, NEAR IRVINE, CA

LOCATION.--Lat 33°39'50", long 117°46'16", in San Joaquin Grant, Orange County, Hydrologic Unit 18070204, on downstream side of Sand Canyon Avenue bridge, 1.0 mi (1.6 km) southwest of East Irvine, and 2.8 mi (4.5 km) east of Irvine.

DRAINAGE AREA.--40.5 mi² (104.9 km²), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1949 to current year. Prior to October 1976 published as "near Irvine".

GAGE.--Water-stage recorder. Altitude of gage is 140 ft (42.7 m), from topographic map. Prior to Oct. 1, 1976, at site 1.0 mi (1.6 km) downstream at different datum.

REMARKS.--Records fair above 10 ft³/s (0.28 m³/s) and poor below. Sewage inflow and irrigation runoff cause low-flow fluctuations in discharge.

COOPERATION.--Twenty-five discharge measurements were furnished by Orange County Environmental Management Agency.

AVERAGE DISCHARGE.--30 years, 4.84 ft³/s (0.137 m³/s), 3,510 acre-ft/yr (4.33 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,700 ft³/s (190 m³/s) Feb. 24, 1969, gage height, 11.46 ft (3.493 m) site and datum then in use, from rating curve extended above 510 ft³/s (14.4 m³/s) on basis of slope-area measurements at gage heights 9.20 ft (2.804 m), and 11.46 ft (3.493 m); maximum gage height, 18.41 ft (5.611 m) Jan. 16, 1978; no flow for long periods in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42.5 m³/s), revised, and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 21	1630	2,110	59.8	16.88	5.145
Jan. 5	2020	*5,550	157	18.21	5.550
Jan. 30	2330	2,870	81.3	17.29	5.270
Feb. 23	0430	2,630	74.5	17.17	5.233
Mar. 20	1430	3,100	87.8	17.40	5.304

Minimum daily discharge, 1.8 ft³/s (0.051 m³/s) Aug. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	2.9	5.3	6.1	67	44	19	8.1	5.9	7.6	3.2	4.0
2	5.7	3.5	5.3	5.3	161	3.2	14	8.1	6.9	6.5	4.4	4.0
3	3.9	3.9	5.7	3.9	14	3.9	18	5.2	5.2	5.2	3.6	3.6
4	4.5	5.3	5.7	3.2	6.1	4.2	15	4.4	4.0	6.5	2.7	4.8
5	4.5	3.5	5.3	1460	6.1	4.5	11	5.9	3.6	9.3	3.6	4.4
6	3.9	3.2	3.9	362	6.1	4.5	13	4.4	4.0	6.0	2.4	2.1
7	4.2	3.2	4.2	10	6.1	4.9	14	3.6	2.7	6.5	3.2	2.1
8	3.2	3.9	4.5	7.1	7.1	4.2	9.5	4.9	3.2	6.0	1.9	4.0
9	2.4	4.5	3.5	9.7	7.6	4.5	7.0	4.4	4.0	4.8	2.7	4.8
10	3.2	8.1	3.2	7.1	7.6	4.2	5.6	4.0	6.4	5.2	3.6	5.2
11	2.2	45	3.2	6.1	8.1	4.2	4.8	4.0	6.9	4.0	3.6	4.9
12	2.4	17	3.5	7.1	5.7	4.2	5.9	4.8	8.7	4.0	3.0	2.4
13	3.9	83	3.2	9.1	5.7	4.2	6.5	4.0	6.5	3.2	2.4	1.9
14	4.5	11	3.2	19	23	4.5	7.6	4.0	7.6	3.6	2.7	2.6
15	3.9	4.5	3.2	45	4.5	4.6	7.0	4.0	7.0	4.4	1.8	3.6
16	4.2	8.1	3.9	14	5.7	7.6	4.8	4.4	8.1	4.4	2.7	2.6
17	5.3	7.6	228	6.1	5.7	89	6.0	4.4	7.6	6.5	2.7	2.6
18	4.9	8.6	109	33	4.2	14	6.5	4.8	7.6	8.1	1.8	3.2
19	4.5	8.6	28	8.6	4.9	200	5.2	5.6	6.5	8.7	1.9	3.6
20	4.9	5.3	4.2	7.1	4.9	287	5.6	7.0	6.0	7.6	3.0	2.6
21	4.5	189	7.1	8.1	63	81	4.0	4.8	4.0	5.6	3.0	3.2
22	5.7	8.1	4.2	8.1	14	8.1	7.6	5.6	4.4	5.6	2.1	4.4
23	4.9	5.3	4.9	6.6	350	8.1	5.2	5.6	4.4	5.2	2.1	4.4
24	7.3	5.3	7.1	8.6	6.1	8.1	6.2	10	6.0	3.2	2.7	4.4
25	2.0	4.9	4.9	8.6	4.9	8.6	8.0	11	6.0	2.6	3.2	4.8
26	6.1	4.9	4.9	8.6	4.9	45	9.0	8.5	6.0	3.6	3.0	4.4
27	5.7	3.5	5.3	8.6	4.9	364	9.0	8.1	4.8	4.0	4.9	4.4
28	7.1	4.2	4.5	9.1	4.9	183	9.5	7.6	6.5	2.1	5.4	3.6
29	5.3	5.3	4.9	8.6	---	97	9.5	6.0	6.5	3.6	5.2	3.6
30	4.2	5.3	8.6	445	---	22	7.0	4.8	6.0	4.4	3.6	3.6
31	3.9	---	7.1	253	---	21	---	5.9	---	4.8	4.4	---
TOTAL	138.6	476.5	499.5	2802.4	813.8	1547.3	261.0	179.9	173.0	162.8	96.5	109.8
MEAN	4.47	15.9	16.1	90.4	29.1	49.9	8.70	5.80	5.77	5.25	3.11	3.66
MAX	7.3	189	228	1460	350	364	19	11	8.7	9.3	5.4	5.2
MIN	2.0	2.9	3.2	3.2	4.2	3.2	4.0	3.6	2.7	2.1	1.8	1.9
AC-FT	275	945	991	5560	1610	3070	518	357	343	323	191	218

CAL YR 1978 TOTAL 9418.07 MEAN 25.8 MAX 864 MIN .38 AC-FT 18680
WTR YR 1979 TOTAL 7261.10 MEAN 19.9 MAX 1460 MIN 1.8 AC-FT 14400

11048500 SAN DIEGO CREEK AT SAND CANYON AVENUE, NEAR IRVINE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June 1972 to current year, prior to Oct. 1976 at site 1 mi (2 km) downstream.
SEDIMENT RECORDS: June 1972 to current year, prior to Oct. 1976 at site 1 mi (2 km) downstream.

REMARKS.--Gage moved to present site at Sand Canyon Ave on Jan. 1977. Prior to Oct. 1976 at site 1 mi (2 km) downstream. No gage from Oct. 1976 to Jan. 1977. Extremes unknown for 1977 water year due to missing record prior to Jan. 19, 1977.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 15,900 mg/L Mar. 1, 1978; minimum daily mean, no flow Dec. 25, 1972, Nov. 15-17, 1973, Jan. 13, 1975.
SEDIMENT DISCHARGE: Maximum daily, 153,000 tons (139,000 metric tons) Jan. 5, 1979; minimum daily, 0 tons on several days most years.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 15,200 mg/L Jan. 5; minimum daily mean, 15 mg/L May 14-17.
SEDIMENT DISCHARGE: Maximum daily, 153,000 tons (139,000 metric tons) Jan. 5; minimum daily, 0.16 tons (0.15 metric tons) May14, 15.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	9.5	---	---	---	---	26.0	20.5	---
2	---	---	---	---	11.0	14.5	---	---	---	---	---	---
3	26.5	---	---	---	---	---	19.0	---	---	18.0	---	---
4	25.0	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	13.0	---	---	---	---	---	---	---	---
6	---	16.0	5.5	13.0	---	---	21.5	---	---	---	---	21.0
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	13.0	---	---	---	21.5	---	---	---	---
9	---	20.0	---	---	---	22.0	---	---	---	---	---	---
10	24.0	---	---	---	---	---	---	---	---	---	25.0	---
11	---	---	---	---	12.5	---	---	13.0	---	24.5	---	---
12	---	---	11.0	---	---	15.0	19.5	---	---	---	---	---
13	20.5	---	---	12.0	18.0	18.5	---	---	---	20.5	---	---
14	---	---	---	12.0	---	18.0	---	26.5	---	25.5	---	---
15	---	15.0	---	12.5	14.5	---	---	---	---	---	---	---
16	21.5	---	---	---	---	12.0	---	---	---	---	---	---
17	21.5	---	---	---	---	11.5	20.5	---	---	---	---	---
18	21.0	---	---	---	14.0	---	---	14.0	---	23.5	---	---
19	---	---	11.0	---	---	14.0	---	---	---	---	17.0	---
20	---	---	---	---	---	---	---	---	---	---	---	21.5
21	---	---	10.0	---	12.5	13.5	---	---	---	---	---	---
22	---	14.0	8.5	12.5	---	---	---	---	---	18.5	---	---
23	---	---	---	---	---	11.5	---	20.5	---	---	---	---
24	---	---	---	---	---	---	16.5	---	19.5	---	---	---
25	---	---	---	---	---	24.5	---	---	---	---	24.0	---
26	---	13.0	---	11.0	---	---	---	---	---	22.5	---	---
27	---	---	11.5	---	---	15.0	---	---	32.5	---	---	---
28	---	---	---	10.5	---	---	---	---	---	---	---	---
29	---	---	---	---	---	20.0	---	---	---	---	---	---
30	---	---	---	---	---	19.0	---	17.0	---	---	---	---
31	---	---	---	11.0	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

11048500 SAN DIEGO CREEK AT SAND CANYON AVENUE, NEAR IRVINE, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5.7	200	3.1	2.9	1100	8.6	5.3	180	2.6
2	5.7	230	3.5	3.5	950	9.0	5.3	190	2.7
3	3.9	262	2.8	3.9	845	8.9	5.7	200	3.1
4	4.5	500	6.1	5.3	600	8.6	5.7	210	3.2
5	4.5	485	5.9	3.5	400	3.8	5.3	220	3.1
6	3.9	470	4.9	3.2	214	1.8	3.9	230	2.4
7	4.2	455	5.2	3.2	210	1.8	4.2	300	3.4
8	3.2	440	3.8	3.9	200	2.1	4.5	350	4.3
9	2.4	425	2.8	4.5	195	2.4	3.5	400	3.8
10	3.2	405	3.5	8.1	300	6.6	3.2	450	3.9
11	2.2	390	2.3	45	1380	322	3.2	500	4.3
12	2.4	375	2.4	17	659	52	3.5	597	5.6
13	3.9	360	3.8	83	2310	1520	3.2	600	5.2
14	4.5	380	4.6	11	800	96	3.2	600	5.2
15	3.9	400	4.2	4.5	200	2.4	3.2	600	5.2
16	4.2	424	4.8	8.1	200	4.4	3.9	650	6.8
17	5.3	152	2.2	7.6	200	4.1	228	4150	4560
18	4.9	780	10	8.6	200	4.6	109	3850	1440
19	4.5	775	9.4	8.6	200	4.6	28	1620	213
20	4.9	760	10	5.3	250	3.6	4.2	220	2.5
21	4.5	740	9.0	189	4660	7220	7.1	150	2.9
22	5.7	720	11	8.1	450	9.8	4.2	193	2.2
23	4.9	700	9.3	5.3	300	4.3	4.9	190	2.5
24	7.3	910	23	5.3	250	3.6	7.1	170	3.3
25	2.0	590	3.2	4.9	200	2.6	4.9	160	2.1
26	6.1	600	9.9	4.9	143	1.9	4.9	150	2.0
27	5.7	650	10	3.5	150	1.4	5.3	146	2.1
28	7.1	675	13	4.2	160	1.8	4.5	140	1.7
29	5.3	700	10	5.3	165	2.4	4.9	138	1.8
30	4.2	724	8.2	5.3	170	2.4	8.6	135	3.1
31	3.9	800	8.4	---	---	---	7.1	132	2.5
TOTAL	138.6	---	210.3	476.5	---	9317.5	499.5	---	6306.5

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6.1	130	2.1	67	2430	594	44	1770	211
2	5.3	125	1.8	161	4390	2590	3.2	21	.18
3	3.9	120	1.3	14	150	5.7	3.9	30	.32
4	3.2	120	1.0	6.1	140	2.3	4.2	40	.45
5	1460	15200	153000	6.1	130	2.1	4.5	60	.73
6	362	6130	24800	6.1	120	2.0	4.5	70	.85
7	10	303	9.8	6.1	110	1.8	4.9	80	1.1
8	7.1	271	5.2	7.1	105	2.0	4.2	90	1.0
9	9.7	275	7.2	7.6	100	2.1	4.5	106	1.3
10	7.1	280	5.4	7.6	90	1.8	4.2	110	1.2
11	6.1	285	4.7	8.1	89	1.9	4.2	110	1.2
12	7.1	290	5.6	5.7	80	1.2	4.2	111	1.3
13	9.1	300	7.4	5.7	69	1.1	4.2	40	.45
14	19	1420	160	23	1010	138	4.5	356	4.3
15	45	2200	597	4.5	240	2.9	4.6	450	5.6
16	14	1550	103	5.7	260	4.0	7.6	562	12
17	6.1	200	3.3	5.7	280	4.3	89	1980	1620
18	33	1790	544	4.2	297	3.4	14	707	110
19	8.6	150	3.5	4.9	300	4.0	200	3670	4370
20	7.1	140	2.7	4.9	300	4.0	287	4900	18200
21	8.1	130	2.8	63	4660	1270	81	2470	1560
22	8.1	122	2.7	14	400	15	8.1	300	6.6
23	6.6	115	2.0	350	5150	28500	8.1	210	4.6
24	8.6	100	2.3	6.1	250	4.1	8.1	350	7.7
25	8.6	85	2.0	4.9	250	3.3	8.6	550	13
26	8.6	74	1.7	4.9	250	3.3	45	600	73
27	8.6	100	2.3	4.9	250	3.3	364	5260	10300
28	9.1	122	3.0	4.9	250	3.3	183	3020	5230
29	8.6	120	2.8	---	---	---	97	768	201
30	445	6760	31900	---	---	---	22	161	9.6
31	253	5980	11200	---	---	---	21	150	8.5
TOTAL	2802.4	---	222286.6	813.8	---	33170.9	1547.3	---	41956.98

11048500 SAN DIEGO CREEK AT SAND CANYON AVENUE, NEAR IRVINE, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

		APRIL			MAY			JUNE	
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	19	100	5.1	8.1	300	6.6	5.9	320	5.1
2	14	80	3.0	8.1	275	6.0	6.9	320	6.0
3	18	54	2.6	5.2	250	3.5	5.2	320	4.5
4	15	60	2.4	4.4	225	2.7	4.0	320	3.5
5	11	90	2.7	5.9	200	3.2	3.6	330	3.2
6	13	131	4.6	6.4	175	3.0	4.0	330	3.6
7	14	140	5.3	3.6	150	1.5	2.7	330	2.4
8	9.5	150	3.8	4.9	116	1.5	3.2	330	2.9
9	7.0	150	2.8	4.4	100	1.2	4.0	330	3.6
10	5.6	160	2.4	4.0	80	.86	6.4	340	5.9
11	4.8	160	2.1	4.0	64	.69	6.9	340	6.3
12	5.9	170	2.7	4.8	50	.65	8.7	340	8.0
13	6.5	150	2.6	4.0	30	.32	6.5	340	6.0
14	7.6	125	2.6	4.0	15	.16	7.6	340	7.0
15	7.0	100	1.9	4.0	15	.16	7.0	350	6.6
16	4.8	75	.97	4.4	15	.18	8.1	350	7.7
17	6.0	45	.73	4.4	15	.18	7.6	350	7.2
18	6.5	50	.88	4.8	750	9.7	7.6	350	7.2
19	5.2	100	1.4	5.6	150	2.3	6.5	350	6.1
20	5.6	150	2.3	7.0	150	2.8	6.0	360	5.8
21	4.0	200	2.2	4.8	140	1.8	4.0	360	3.9
22	7.6	250	5.1	5.6	140	2.1	4.4	360	4.3
23	5.2	350	4.9	5.6	136	2.1	4.4	360	4.3
24	6.2	494	8.3	10	150	4.1	6.0	350	5.8
25	8.0	450	9.7	11	180	5.3	6.0	360	5.8
26	9.0	400	9.7	8.5	210	4.8	6.0	380	6.2
27	9.0	375	9.1	8.1	240	5.2	4.8	400	5.2
28	9.5	350	9.0	7.6	270	5.5	6.5	400	7.0
29	9.5	350	9.0	6.0	300	4.9	6.5	400	7.0
30	7.0	325	6.1	4.8	310	4.1	6.0	600	9.7
31	---	---	---	5.9	---	---	---	---	---
TOTAL	261.0	---	125.98	179.9	---	87.10	173.0	---	167.8

		JULY			AUGUST			SEPTEMBER	
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	7.6	800	16	3.2	772	6.7	4.0	190	2.1
2	6.5	550	9.7	4.4	700	8.3	4.0	180	1.9
3	5.2	364	5.1	3.6	600	5.8	3.6	170	1.7
4	6.5	400	7.0	2.7	500	3.6	4.8	160	2.1
5	9.3	600	15	3.6	499	4.9	4.4	150	1.8
6	6.0	800	13	2.4	500	3.2	2.1	100	.57
7	6.5	1000	18	3.2	550	4.8	2.1	100	.57
8	6.0	1200	19	1.9	600	3.1	4.0	150	1.6
9	4.8	1400	18	2.7	619	4.5	4.8	200	2.6
10	5.2	1500	21	3.6	1030	10	5.2	250	3.5
11	4.0	1550	17	3.6	800	7.8	4.9	250	3.3
12	4.0	1450	16	3.0	700	5.7	2.4	250	1.6
13	3.2	1390	12	2.4	600	3.9	1.9	300	1.5
14	3.6	1700	17	2.7	500	3.6	2.6	350	2.5
15	4.4	1800	21	1.8	400	1.9	3.6	400	3.9
16	4.4	1900	23	2.7	300	2.2	2.6	450	3.2
17	6.5	2000	35	2.7	200	1.5	2.6	500	3.5
18	8.1	2050	45	1.8	100	.49	3.2	550	4.8
19	8.7	2000	47	1.9	62	.32	3.6	600	5.8
20	7.6	1900	39	3.0	100	.81	2.6	613	4.3
21	5.6	1800	27	3.0	150	1.2	3.2	600	5.2
22	5.6	1740	26	2.1	150	.85	4.4	560	6.7
23	5.2	1600	22	2.1	200	1.1	4.4	540	6.4
24	3.2	1500	13	2.7	200	1.5	4.4	500	5.9
25	2.6	1400	9.8	3.2	253	2.2	4.8	460	6.0
26	3.6	1200	12	3.0	250	2.0	4.4	440	5.2
27	4.0	1150	12	4.9	250	3.3	4.4	400	4.8
28	2.1	1100	6.2	5.4	250	3.6	3.6	360	3.5
29	3.6	1000	9.7	5.2	230	3.2	3.6	340	3.3
30	4.4	900	11	3.6	200	1.9	3.6	300	2.9
31	4.8	800	10	4.4	200	2.4	---	---	---
TOTAL	162.8	---	572.5	96.5	---	106.37	109.8	---	102.76
YEAR	7261.1		14411.3						

11048500 SAN DIEGO CREEK AT SAND CANYON AVENUE, NEAR IRVINE, CA--Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1978	138.60	210.30	92	302
NOVEMBER ...	476.50	9317.50	2760	12100
DECEMBER ...	499.50	6306.50	3190	9500
JANUARY 1979	2802.40	222286.60	17400	240000
FEBRUARY ...	813.80	33170.90	5730	38900
MARCH	1547.30	41956.98	12200	54100
APRIL	261.00	125.98	408	534
MAY	179.90	87.10	166	253
JUNE	173.00	167.80	154	322
JULY	162.80	572.50	136	708
AUGUST	96.50	106.37	42	148
SEPTEMBER ..	109.80	102.74	56	159
TOTAL	7261.10	314411.27	42334	357026

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPER-ATURE, WATER (DEG C)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM
DEC 12...	1140	11.0	4.4	597	7.1	79	90	93	94	--
JAN 05...	1515	13.0	1330	15000	53900	--	40	42	47	56
31...	1030	10.5	161	5220	2270	--	31	34	42	49
FEB 23...	1425	17.5	18	1120	54	--	45	52	54	57
MAR 27...	1405	15.0	822	9680	21500	--	25	31	38	46
27...	1520	15.0	418	619	699	--	27	29	35	42
29...	1345	20.0	42	840	95	41	45	48	51	56
JUL 13...	1000	20.5	3.2	1390	12	--	77	88	94	97

DATE	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
DEC 12...	--	--	--	96	--	99	--	100	--	--
JAN 05...	63	--	74	--	80	--	99	--	100	--
31...	--	57	--	70	--	91	--	99	--	100
FEB 23...	--	66	--	84	--	99	--	100	--	--
MAR 27...	--	52	--	66	--	81	--	95	--	100
27...	--	53	--	71	--	87	--	96	--	100
29...	--	62	--	81	--	96	--	100	--	--
JUL 13...	--	100	--	--	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPER-ATURE, WATER (DEG C)	NUMBER OF SAM-PLING POINTS	STREAM-FLOW, INSTAN-TANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM
SEP 20...	1130	21.5	5	4.0	7	17	32	53	77	92	97	100

11048530 EL MODENA-IRVINE CHANNEL NEAR IRVINE, CA

LOCATION.--Lat 33°42'49", long 117°48'01", in Lomas Santiago Grant, Orange County, Hydrologic Unit 18070204, on downstream side of county road bridge, 50 ft (30 m) west of intersection of Myford Road and Walnut Avenue, and 0.5 mi (0.8 km) southwest of Interstate 5.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 60 ft (18 m), from topographic map.

REMARKS.--Records good.

COOPERATION.--Records of discharge were furnished by Orange County Environmental Management Agency and reviewed by the Geological Survey.

AVERAGE DISCHARGE.--5 years, 3.97 ft³/s (0.112 m³/s), 2,880 acre-ft/yr (3.55 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,380 ft³/s (67.4 m³/s) Mar. 4, 1978; gage height, 8.20 ft (2.499 m), maximum gage height, 8.40 ft (2.560 m) Dec. 4, 1974 (channel aggradation); minimum daily discharge, 0.10 ft³/s (0.003 m³/s) for several days in 1975 and 1976 water years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 13	1700	212	6.00	3.40	1.036	Feb. 23	0300	521	14.8	4.50	1.372
Dec. 17	1800	455	12.9	4.67	1.423	Mar. 17	0500	334	9.46	3.80	1.158
Jan. 5	2000	2,010	56.9	7.80	2.377	Mar. 19	0900	266	7.53	3.48	1.061
Jan. 31	1500	633	17.9	4.88	1.487	Mar. 27	1100	*2,330	66.0	8.30	2.530

Minimum daily discharge, 0.40 ft³/s (0.011 m³/s) Oct. 12, 13, 18, and 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	1.9	1.3	.50	43	16	1.5	1.3	2.0	2.4	2.6	1.3
2	.60	1.8	1.5	.50	44	.70	1.5	1.4	2.1	2.8	3.2	1.6
3	.80	1.8	1.6	.50	1.2	.70	1.4	1.7	2.5	3.2	2.9	1.5
4	.90	1.3	1.2	.50	.70	.70	1.4	2.2	2.5	3.0	2.9	1.4
5	.70	1.8	1.2	197	.60	.70	1.4	2.9	2.1	3.0	2.5	1.5
6	.60	1.5	1.2	17	.60	.70	1.4	3.0	2.1	2.5	2.3	1.5
7	.80	1.4	1.7	1.6	.60	.70	1.4	2.6	2.3	2.5	2.0	1.3
8	1.8	1.8	1.7	1.4	1.0	.70	1.3	1.9	2.8	2.5	1.6	1.4
9	2.1	1.9	2.5	11	1.0	.70	1.4	2.1	2.9	2.5	1.9	1.5
10	1.8	9.6	2.1	1.0	1.0	.70	1.3	2.1	2.9	2.0	1.9	1.2
11	.70	27	1.6	1.0	1.0	.70	1.2	1.9	3.0	2.0	2.4	1.0
12	.40	6.3	1.7	.90	1.0	.70	1.2	1.4	3.5	2.0	3.2	1.1
13	.40	34	2.4	.90	1.0	5.7	1.3	1.4	3.0	2.0	3.2	1.0
14	.60	2.1	2.1	9.4	12	.60	1.3	2.2	3.4	2.4	2.0	1.0
15	.80	1.9	1.7	25	54	.60	1.3	1.4	3.0	2.9	2.6	1.0
16	.70	1.8	2.5	5.3	.80	.60	1.3	1.9	2.6	2.8	3.0	1.0
17	.70	1.8	73	1.9	.80	36	1.3	1.7	1.8	2.8	2.4	1.0
18	.40	1.8	33	19	.80	.70	1.3	1.6	2.0	2.5	2.8	1.0
19	.50	1.8	15	.90	2.1	39	1.0	1.6	2.5	2.8	2.6	1.0
20	.40	1.8	1.6	.90	5.8	34	.50	1.8	2.2	2.4	2.8	1.1
21	.50	33	1.2	.90	59	6.9	.50	2.1	2.1	2.0	2.5	1.3
22	.50	6.1	1.1	.90	.90	.80	.50	2.3	2.1	1.7	2.5	1.5
23	.60	1.5	1.0	.90	37	.80	1.0	2.4	2.2	1.8	2.5	1.4
24	1.1	1.4	1.0	.90	.90	.70	2.1	2.5	2.1	1.7	1.5	1.4
25	.80	1.5	.80	1.0	.90	.70	3.0	2.5	2.1	1.8	1.6	1.4
26	2.1	1.5	.70	1.0	.90	7.2	3.7	2.1	2.1	2.1	1.8	1.9
27	2.2	1.5	.60	1.0	.90	317	3.2	2.3	1.8	1.8	2.0	1.1
28	2.1	1.5	.60	6.1	.90	66	2.3	2.1	1.9	1.8	2.2	1.6
29	2.1	1.4	.60	1.2	---	18	1.4	2.3	1.8	2.1	2.1	1.6
30	2.0	1.3	.70	86	---	1.8	1.5	2.1	2.2	2.4	1.7	1.6
31	1.4	---	.50	67	---	1.6	---	2.1	---	2.4	1.6	---
TOTAL	31.70	155.8	159.40	463.10	274.40	562.40	44.90	62.9	71.6	73.2	72.8	39.2
MEAN	1.02	5.19	5.14	14.9	9.80	18.1	1.50	2.03	2.39	2.36	2.35	1.31
MAX	2.2	34	73	197	59	317	3.7	3.0	3.5	3.2	3.2	1.9
MIN	.40	1.3	.50	.50	.60	.60	.50	1.3	1.8	1.7	1.5	1.0
AC-FT	63	309	316	919	544	1120	89	125	142	145	144	78

CAL YR 1978 TOTAL 2711.98 MEAN 7.43 MAX 283 MIN .13 AC-FT 5380
WTR YR 1979 TOTAL 2011.40 MEAN 5.51 MAX 317 MIN .40 AC-FT 3990

11048530 EL MODENA-IRVINE CHANNEL NEAR IRVINE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1974 to September 1979 (discontinued).
SEDIMENT RECORDS: October 1974 to September 1979 (discontinued).

REMARKS.--Records of discharge were furnished by Orange County Environmental Management Agency.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,230 mg/L Dec. 4, 1974; minimum daily mean, 1 mg/L Feb. 18, 1976.
SEDIMENT DISCHARGE: Maximum daily, 5,080 tons (4,610 metric tons) Feb. 10, 1978; minimum daily, 0 tons on several days in 1976, 1978.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,770 mg/L Mar. 27; minimum daily mean, 2 mg/L Dec. 6, 27.
SEDIMENT DISCHARGE: Maximum daily, 4,000 tons (3,630 metric tons) Mar. 27; minimum daily, 0 tons Dec. 27, 28.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	17.5	---	---	9.5	---	---	---	---	23.0	20.0	---
2	---	---	---	---	11.0	18.0	---	---	---	---	---	---
3	25.0	14.0	---	9.0	---	---	17.0	---	---	18.0	---	---
4	24.0	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	24.5	---	---	---	20.5	---
6	---	16.5	6.0	16.0	---	---	---	---	---	---	---	23.0
7	---	21.5	---	---	---	---	---	---	---	---	---	---
8	---	---	---	14.0	22.5	---	---	17.5	---	---	---	---
9	---	---	---	---	---	15.5	---	---	---	---	28.0	---
10	24.0	---	---	---	---	---	---	---	---	---	18.5	---
11	---	---	---	---	13.0	---	---	21.0	---	22.0	---	---
12	---	---	16.5	---	---	21.5	19.0	---	---	---	---	---
13	26.0	---	---	10.0	19.0	19.0	---	---	---	21.5	---	---
14	---	---	---	14.0	---	---	---	---	---	24.5	---	---
15	---	14.0	---	12.0	13.5	---	---	---	---	---	---	---
16	22.5	---	---	---	---	20.0	---	---	---	---	---	---
17	22.5	---	---	---	---	12.5	18.5	---	---	---	---	---
18	22.0	---	---	---	14.0	---	---	19.0	---	22.0	---	---
19	---	---	11.0	---	---	15.5	---	---	---	---	17.0	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	16.0	---	---	13.5	---	---	---	---	---	---
22	---	16.0	9.5	12.5	---	---	---	---	---	18.5	---	---
23	---	---	---	---	15.5	20.5	---	19.5	---	---	---	---
24	21.0	---	---	---	---	---	19.5	---	19.5	---	---	---
25	21.5	---	---	---	---	25.0	---	---	---	---	21.5	---
26	---	12.0	---	7.0	---	---	---	---	---	23.5	---	---
27	---	---	13.0	---	20.5	14.0	---	---	28.0	---	---	23.0
28	---	---	---	10.5	14.0	18.0	---	---	---	---	---	---
29	---	---	---	---	---	13.5	---	---	---	---	---	---
30	18.5	---	---	---	---	18.0	---	18.0	---	---	---	---
31	---	---	8.5	11.5	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

11048530 EL MODENA-IRVINE CHANNEL NEAR IRVINE, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.60	115	.19	1.9	66	.34	1.3	18	.06
2	.60	140	.23	1.8	62	.30	1.5	19	.08
3	.80	168	.36	1.8	36	.17	1.6	18	.08
4	.90	107	.26	1.3	33	.12	1.2	10	.03
5	.70	92	.17	1.8	29	.14	1.2	5	.02
6	.60	88	.14	1.5	28	.11	1.2	2	.01
7	.80	94	.20	1.4	38	.14	1.7	15	.07
8	1.8	120	.58	1.8	45	.22	1.7	35	.16
9	2.1	125	.71	1.9	56	.29	2.5	52	.35
10	1.8	70	.34	9.6	271	28	2.1	56	.32
11	.70	72	.14	27	563	100	1.6	56	.24
12	.40	80	.09	6.3	151	8.8	1.7	56	.26
13	.40	103	.11	34	463	155	2.4	55	.36
14	.60	88	.14	2.1	90	.51	2.1	55	.31
15	.80	40	.09	1.9	48	.25	1.7	57	.26
16	.70	17	.03	1.8	33	.16	2.5	70	.47
17	.70	12	.02	1.8	29	.14	73	1090	499
18	.40	34	.04	1.8	26	.13	33	754	174
19	.50	32	.04	1.8	24	.12	15	353	25
20	.40	30	.03	1.8	24	.12	1.6	130	.56
21	.50	26	.04	33	469	188	1.2	47	.15
22	.50	23	.03	6.1	234	13	1.1	25	.07
23	.60	20	.03	1.5	100	.41	1.0	21	.06
24	1.1	18	.05	1.4	40	.15	1.0	17	.05
25	.80	80	.17	1.5	18	.07	.80	12	.03
26	2.1	130	.74	1.5	16	.06	.70	7	.01
27	2.2	190	1.1	1.5	16	.06	.60	2	0
28	2.1	185	1.0	1.5	16	.06	.60	3	0
29	2.1	175	.99	1.4	17	.06	.60	4	.01
30	2.0	79	.43	1.3	18	.06	.70	5	.01
31	1.4	70	.26	---	---	---	.50	5	.01
TOTAL	31.70	---	8.75	155.8	---	496.99	159.40	---	702.04

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.50	5	.01	43	474	115	16	325	67
2	.50	6	.01	44	896	203	.70	37	.07
3	.50	6	.01	1.2	45	.15	.70	23	.04
4	.50	7	.01	.70	16	.03	.70	18	.03
5	197	1290	3220	.60	12	.02	.70	15	.03
6	17	150	6.9	.60	11	.02	.70	13	.02
7	1.6	45	.19	.60	15	.02	.70	10	.02
8	1.4	36	.14	1.0	121	.33	.70	8	.02
9	11	380	27	1.0	54	.15	.70	3	.01
10	1.0	29	.08	1.0	22	.06	.70	5	.01
11	1.0	25	.07	1.0	12	.03	.70	18	.03
12	.90	24	.06	1.0	16	.04	.70	96	.18
13	.90	57	.14	1.0	24	.06	5.7	451	26
14	9.4	143	13	12	461	63	.60	120	.19
15	25	378	52	54	30	4.4	.60	18	.03
16	5.3	150	2.1	.80	42	.09	.60	8	.01
17	1.9	100	.51	.80	58	.13	36	715	260
18	19	451	64	.80	74	.16	.70	110	.21
19	.90	22	.05	2.1	130	.74	39	639	177
20	.90	14	.03	5.8	308	4.8	34	628	138
21	.90	11	.03	59	885	471	6.9	237	13
22	.90	9	.02	.90	68	.17	.80	42	.09
23	.90	8	.02	37	749	359	.80	28	.06
24	.90	7	.02	.90	60	.15	.70	40	.08
25	1.0	6	.02	.90	52	.13	.70	210	.40
26	1.0	5	.01	.90	48	.12	7.2	425	8.3
27	1.0	8	.02	.90	45	.11	317	1770	4000
28	6.1	139	8.7	.90	43	.10	66	795	417
29	1.2	28	.09	---	---	---	18	325	45
30	86	891	894	---	---	---	1.8	25	.12
31	67	738	484	---	---	---	1.6	24	.10
TOTAL	463.10	---	4773.24	274.40	---	1223.01	562.40	---	5153.05

11048530 EL MODENA-IRVINE CHANNEL NEAR IRVINE, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.5	23	.09	1.3	62	.22	2.0	250	1.4
2	1.5	38	.15	1.4	65	.25	2.1	240	1.4
3	1.4	62	.23	1.7	68	.31	2.5	230	1.6
4	1.4	64	.24	2.2	86	.51	2.5	225	1.5
5	1.4	67	.25	2.9	108	.85	2.1	220	1.2
6	1.4	62	.23	3.0	140	1.1	2.1	220	1.2
7	1.4	60	.23	2.6	180	1.3	2.3	230	1.4
8	1.3	56	.20	1.9	236	1.2	2.8	250	1.9
9	1.4	53	.20	2.1	200	1.1	2.9	240	1.9
10	1.3	50	.18	2.1	170	.96	2.9	225	1.8
11	1.2	49	.16	1.9	154	.79	3.0	190	1.5
12	1.2	47	.15	1.4	150	.57	3.5	160	1.5
13	1.3	48	.17	1.4	155	.59	3.0	150	1.2
14	1.3	50	.18	2.2	160	.95	3.4	145	1.3
15	1.3	51	.18	1.4	165	.62	3.0	145	1.2
16	1.3	54	.19	1.9	168	.86	2.6	165	1.2
17	1.3	57	.20	1.7	172	.79	1.8	180	.87
18	1.3	55	.19	1.6	188	.81	2.0	200	1.1
19	1.0	51	.14	1.6	180	.78	2.5	280	1.9
20	.50	45	.06	1.8	170	.83	2.2	325	1.9
21	.50	43	.06	2.1	165	.94	2.1	330	1.9
22	.50	40	.05	2.3	160	.99	2.1	330	1.9
23	1.0	38	.10	2.4	160	1.0	2.2	330	2.0
24	2.1	35	.20	2.5	165	1.1	2.1	327	1.9
25	3.0	50	.41	2.5	172	1.2	2.1	200	1.1
26	3.7	98	.98	2.1	200	1.1	2.1	120	.68
27	3.2	94	.81	2.3	220	1.4	1.8	70	.34
28	2.3	85	.53	2.1	245	1.4	1.9	72	.37
29	1.4	72	.27	2.3	260	1.6	1.8	73	.35
30	1.5	65	.26	2.1	271	1.5	2.2	75	.45
31	---	---	---	2.1	265	1.5	---	---	---
TOTAL	44.90	---	7.29	62.9	---	[illegible]9.12	71.6	---	39.96

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.4	76	.49	2.6	223	1.6	1.3	148	.52
2	2.8	110	.83	3.2	250	2.2	1.6	140	.60
3	3.2	144	1.2	2.9	240	1.9	1.5	138	.56
4	3.0	142	1.2	2.9	210	1.6	1.4	135	.51
5	3.0	140	1.1	2.5	165	1.1	1.5	132	.53
6	2.5	138	.93	2.3	165	1.0	1.5	127	.51
7	2.5	135	.91	2.0	168	.91	1.3	125	.44
8	2.5	132	.89	1.6	170	.73	1.4	123	.46
9	2.5	130	.88	1.9	175	.90	1.5	125	.51
10	2.0	129	.70	1.9	180	.92	1.2	135	.44
11	2.0	128	.69	2.4	190	1.7	1.0	142	.38
12	2.0	118	.64	3.2	255	2.2	1.1	157	.47
13	2.6	104	.73	3.2	245	2.1	1.0	175	.47
14	2.4	117	.76	2.0	190	1.0	1.0	170	.46
15	2.9	145	1.1	2.6	200	1.4	1.0	163	.44
16	2.8	240	1.8	3.0	250	2.0	1.0	158	.43
17	2.8	235	1.8	2.4	230	1.5	1.0	151	.41
18	2.5	230	1.6	2.8	210	1.6	1.0	146	.39
19	2.8	220	1.7	2.6	198	1.4	1.0	138	.37
20	2.4	200	1.3	2.8	210	1.6	1.1	132	.39
21	2.0	185	1.0	2.5	200	1.4	1.3	128	.45
22	1.7	176	.81	2.5	190	1.3	1.5	123	.50
23	1.8	178	.87	2.5	185	1.2	1.4	120	.45
24	1.7	180	.83	1.5	250	1.0	1.4	118	.45
25	1.8	188	.91	1.6	272	1.2	1.4	115	.43
26	2.1	195	1.1	1.8	210	1.0	1.9	112	.57
27	1.8	200	.97	2.0	190	1.0	1.1	110	.33
28	1.8	205	1.0	2.2	175	1.0	1.6	110	.48
29	2.1	208	1.2	2.1	167	.95	1.6	108	.47
30	2.4	210	1.4	1.7	158	.73	1.6	110	.48
31	2.4	212	1.4	1.6	155	.67	---	---	---
TOTAL	73.2	---	32.74	72.8	---	40.31	39.2	---	13.90
YEAR	2011.40		12520.40						

11048530 EL MODENA-IRVINE CHANNEL NEAR IRVINE, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPER-ATURE, WATER (DEG C)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
OCT								
13...	1215	26.0	.60	103	.17	--	--	--
NOV								
15...	1000	14.0	1.9	48	.25	--	--	--
DEC								
06...	0835	6.0	.50	2	.00	--	--	--
12...	1335	16.5	1.3	56	.20	--	--	--
21...	1300	16.0	1.0	47	.13	--	--	--
JAN								
06...	1615	16.0	2.4	69	.45	--	--	--
15...	1135	12.0	74	1960	393	--	31	40
FEB								
01...	1005	9.5	46	727	90	73	81	84
02...	1525	9.0	147	2570	1020	--	45	49
02...	1545	9.0	113	1950	595	--	--	--
08...	1405	22.5	27	121	9.0	--	--	--
23...	1330	15.5	1.6	416	1.8	--	--	--
MAR								
13...	1340	18.0	34	1150	106	--	--	--
13...	1405	18.0	25	1980	134	--	--	--
13...	1430	18.5	17	2080	98	--	68	82
13...	1545	19.0	7.8	1440	30	--	63	86
27...	0940	14.0	213	2240	1290	--	26	30
27...	1050	14.5	443	3490	4170	--	31	35
27...	1105	14.5	846	5760	13200	--	28	30
27...	1120	14.5	1320	7580	27100	--	27	29
27...	1135	14.1	2120	9660	55300	--	29	31
28...	1530	18.0	13	373	13	--	--	--
29...	1010	13.5	11	284	8.4	--	--	--
APR								
24...	1020	19.5	1.9	35	.18	--	--	--
MAY								
30...	0945	--	2.5	248	1.7	--	--	--
JUL								
13...	1245	--	2.9	104	.81	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
OCT								
13...	--	--	36	--	--	--	--	--
NOV								
15...	--	--	50	--	--	--	--	--
DEC								
06...	--	--	57	--	--	--	--	--
12...	--	--	82	--	--	--	--	--
21...	--	--	49	--	--	--	--	--
JAN								
06...	--	--	98	--	--	--	--	--
15...	47	59	73	83	91	100	--	--
FEB								
01...	87	90	93	96	100	--	--	--
02...	56	67	76	83	91	95	99	100
02...	--	--	84	--	--	--	--	--
08...	--	--	--	--	--	--	--	--
23...	--	--	99	--	--	--	--	--
MAR								
13...	--	--	93	--	--	--	--	--
13...	--	--	97	--	--	--	--	--
13...	93	98	100	--	--	--	--	--
13...	94	99	--	--	100	--	--	--
27...	35	42	53	68	85	99	100	--
27...	40	49	62	78	91	96	100	--
27...	36	46	57	78	92	98	100	--
27...	34	43	56	73	90	98	100	--
27...	37	45	57	75	93	99	100	--
28...	--	--	100	--	--	--	--	--
29...	--	--	100	--	--	--	--	--
APR								
24...	--	--	20	--	--	--	--	--
MAY								
30...	--	--	89	--	--	--	--	--
JUL								
13...	--	--	96	--	--	--	--	--

11048555 SAN DIEGO CREEK AT CAMPUS DRIVE, NEAR IRVINE, CA

LOCATION.--Lat 33°39'20", long 117°50'41", in SE¼NE¼SE¼ sec.58, T.6 S., R.9 W., in San Joaquin Grant, Orange County, Hydrologic Unit 18070204, on right bank downstream abutment of Campus Drive bridge, 450 ft (140 m) northwest of University Drive, and 1 mi (1.6 km) east of McArthur Boulevard.

DRAINAGE AREA.--Not determined.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 15 ft (4.6 m), from topographic map.

REMARKS.--Records fair.

COOPERATION.--Records were furnished by Orange County Environmental Management Agency.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,080 ft³/s (257 m³/s) Feb. 10, 1978, gage height, 12.47 ft (3.801 m); minimum daily, 10 ft³/s (0.28 m³/s) Dec. 31, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,400 ft³/s (181 m³/s) Mar. 27, gage height, 11.20 ft (3.414 m); minimum daily, 11 ft³/s (0.31 m³/s) Nov. 19, 20, and 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	17	15	14	369	111	43	27	25	26	25	20
2	24	19	17	14	348	30	47	29	27	26	25	20
3	22	20	14	17	38	18	47	30	27	27	24	21
4	25	20	14	14	29	18	32	28	22	27	24	21
5	23	20	15	1180	26	19	26	28	23	27	24	21
6	23	18	16	527	24	20	21	31	21	28	24	21
7	23	16	15	30	24	20	24	30	23	28	24	22
8	19	17	15	15	24	22	22	30	25	28	24	22
9	19	16	18	39	24	29	21	30	27	29	24	22
10	21	49	17	20	24	29	19	26	30	29	24	22
11	20	135	15	14	23	30	24	25	32	29	24	23
12	17	84	16	15	23	30	24	26	39	29	24	23
13	18	400	16	14	23	36	35	24	35	28	24	23
14	19	74	15	45	144	25	35	27	36	28	24	24
15	19	14	16	124	33	23	33	27	33	27	24	24
16	17	14	18	78	31	26	30	26	31	26	23	24
17	18	13	373	34	30	234	31	24	28	26	22	25
18	19	13	251	118	28	32	31	25	26	25	22	25
19	19	11	54	38	31	529	30	28	26	25	21	25
20	18	11	19	26	29	446	29	26	27	25	20	25
21	20	227	15	23	299	225	23	24	26	24	20	24
22	18	58	15	20	43	38	23	26	26	24	19	23
23	18	20	14	17	450	37	22	28	26	24	19	23
24	24	12	14	16	32	30	22	32	25	24	19	22
25	17	12	14	16	24	28	24	39	25	23	19	21
26	21	12	14	16	20	26	21	32	25	24	19	20
27	19	12	14	18	18	1490	24	31	24	24	19	22
28	21	11	14	26	19	780	27	29	25	24	19	23
29	21	13	14	24	---	169	28	29	25	24	19	24
30	18	14	14	647	---	43	26	28	26	24	19	25
31	18	---	14	769	---	43	---	27	---	25	20	---
TOTAL	625	1372	1105	3968	2230	4636	844	872	816	807	681	680
MEAN	20.2	45.7	35.6	128	79.6	150	28.1	28.1	27.2	26.0	22.0	22.7
MAX	27	400	373	1180	450	1490	47	39	39	29	25	25
MIN	17	11	14	14	18	18	19	24	21	23	19	20
AC-FT	1240	2720	2190	7870	4420	9200	1670	1730	1620	1600	1350	1350

CAL YR 1978 TOTAL 30845 MEAN 84.5 MAX 2340 MIN 11 AC-FT 61180
WTR YR 1979 TOTAL 18636 MEAN 51.1 MAX 1490 MIN 11 AC-FT 36960

11048555 SAN DIEGO CREEK AT CAMPUS DRIVE, NR IRVINE, CA

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
WATER TEMPERATURES: October 1977 to September 1979 (discontinued).
SEDIMENT RECORDS: October 1977 to September 1979 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1977 to September 1979.
SEDIMENT RECORDS: October 1977 to September 1979.

REMARKS.--Total load data not published in the 1978 report is shown below.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 6,070 mg/L Feb. 10, 1978; minimum daily mean, 65 mg/L Apr. 10, 1979.
SEDIMENT DISCHARGE: Maximum daily, 55,100 tons (50,000 metric tons) Mar. 4, 1978; minimum daily, 3 tons (2.6 metric tons) Dec. 31, 1979.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 5,100 mg/L Jan. 5; minimum daily mean, 65 mg/L Apr. 10.
SEDIMENT DISCHARGE: Maximum daily, 32,600 tons (29,600 metric tons) Jan. 5; minimum daily, 2.9 tons (2.6 metric tons) Dec. 31.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	9.0	---	---	---	---	21.5	18.0	
2	---	12.0	---	---	---	15.0	---	---	---	---	---	
3	27.0	---	---	8.0	---	---	16.5	---	---	18.0	---	
4	26.5	---	---	---	15.0	---	17.0	---	---	---	---	
5	---	15.0	---	13.0	---	---	15.5	---	---	---	17.5	
6	---	---	5.0	15.5	---	---	---	---	---	---	---	
7	---	---	---	---	15.5	---	---	---	---	---	---	
8	---	---	---	13.0	---	---	---	14.0	---	15.5	---	
9	---	18.0	---	---	---	22.5	---	---	---	---	30.0	
10	27.0	---	---	---	---	---	15.0	---	---	---	18.0	
11	---	---	---	---	12.5	---	---	---	---	19.5	---	
12	17.5	---	7.5	14.0	---	13.0	15.5	---	---	---	19.5	
13	23.5	---	---	9.5	---	---	---	---	---	---	---	
14	---	---	---	12.5	---	16.0	---	---	---	---	---	
15	17.5	15.0	---	12.5	14.0	---	---	---	---	---	---	
16	---	---	---	---	---	19.0	19.5	---	---	---	---	
17	23.5	---	---	---	---	13.0	24.5	---	---	---	---	
18	---	---	---	---	14.5	---	---	18.5	---	21.5	---	
19	15.5	---	11.5	---	---	12.5	---	---	---	19.0	17.0	
20	---	---	---	---	14.0	---	---	---	---	---	---	
21	---	---	13.0	---	14.5	14.5	---	---	---	---	---	
22	---	14.0	8.0	9.5	---	---	---	---	---	---	---	
23	---	---	---	---	---	18.0	---	18.0	---	---	---	
24	23.0	15.5	---	---	---	---	25.0	---	20.0	---	---	
25	---	15.5	---	---	---	---	---	17.5	---	---	18.0	
26	---	13.5	---	11.0	---	---	---	---	---	---	---	
27	---	---	12.0	---	---	---	---	---	24.0	---	---	
28	---	---	---	7.5	11.0	14.0	---	---	---	19.0	---	
29	18.0	---	---	---	---	15.0	---	---	---	---	---	
30	---	---	---	---	---	16.0	---	18.5	---	---	---	
31	---	---	8.0	12.0	---	---	---	---	---	---	---	
MONTH	---	---	---	---	---	---	---	---	---	---	---	

11048555 SAN DIEGO CREEK AT CAMPUS DRIVE, NEAR IRVINE, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	27	130	9.5	17	330	15	15	120	4.9
2	24	130	8.4	19	326	17	17	120	5.5
3	22	125	7.4	20	300	16	14	120	4.5
4	25	123	8.3	20	260	14	14	120	4.5
5	23	120	7.5	20	230	12	15	120	4.9
6	23	110	6.8	18	200	9.7	16	124	5.4
7	23	100	6.2	16	160	6.9	15	130	5.3
8	19	95	4.9	17	140	6.4	15	140	5.7
9	19	90	4.6	16	132	5.7	18	150	7.3
10	21	88	5.0	49	841	155	17	160	7.3
11	20	95	5.1	135	1640	982	15	172	7.0
12	17	109	5.0	84	1690	642	16	170	7.3
13	18	206	10	400	2020	6800	16	170	7.3
14	19	190	9.7	74	1320	574	15	160	6.5
15	19	175	9.0	14	240	9.1	16	160	6.9
16	17	100	4.6	14	210	7.9	18	150	7.3
17	18	70	3.4	13	190	6.7	373	2680	5200
18	19	140	7.2	13	170	6.0	251	2530	2490
19	19	195	10	11	160	4.8	54	915	164
20	18	200	9.7	11	150	4.5	19	350	18
21	20	210	11	227	1750	2690	15	250	10
22	18	220	11	58	1390	318	15	127	5.1
23	18	230	11	20	500	27	14	120	4.5
24	24	231	15	12	126	4.1	14	110	4.2
25	17	270	12	12	110	3.6	14	100	3.8
26	21	300	17	12	124	4.0	14	105	4.0
27	19	330	17	12	120	3.9	14	94	3.6
28	21	350	20	11	120	3.6	14	90	3.4
29	21	387	22	13	120	4.2	14	85	3.2
30	18	370	18	14	120	4.5	14	80	3.0
31	18	350	17	---	---	---	14	76	2.9
TOTAL	625	---	313.3	1372	---	12357.6	1105	---	8017.3

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	14	100	3.8	369	2170	2740	111	1380	708
2	14	120	4.5	344	2960	3540	30	200	16
3	17	142	6.5	38	950	97	18	180	8.7
4	14	140	5.3	29	250	20	18	160	7.8
5	1180	5100	32600	26	220	15	19	150	7.7
6	527	2540	7420	24	190	12	20	200	11
7	30	450	36	24	180	12	20	200	11
8	15	138	5.6	24	160	10	22	250	15
9	39	798	123	24	140	9.1	29	294	23
10	20	350	19	24	120	7.8	29	200	16
11	14	200	7.6	23	117	7.3	30	180	15
12	15	148	6.0	23	115	7.1	30	160	13
13	14	138	5.2	23	100	6.2	36	489	50
14	45	617	193	144	1450	1070	25	150	10
15	124	1830	712	33	180	16	23	150	9.3
16	78	1150	292	31	120	10	26	186	13
17	34	300	28	30	100	8.1	234	3080	3170
18	118	1380	857	28	99	7.5	32	1090	100
19	38	450	46	31	95	8.0	529	3360	7340
20	26	300	21	29	92	7.2	446	3290	6920
21	23	200	12	299	3030	3870	225	2500	2340
22	20	119	6.4	43	1100	128	38	300	31
23	17	115	5.3	450	3620	8990	37	100	10
24	16	115	5.0	32	600	52	30	100	8.1
25	16	115	5.0	24	400	26	28	100	7.6
26	16	114	4.9	20	250	14	26	100	7.0
27	18	100	4.9	18	200	9.7	1490	4590	31600
28	26	550	39	19	149	7.6	780	3130	12900
29	24	400	26	---	---	---	169	1730	1070
30	647	2380	13900	---	---	---	43	580	67
31	769	4160	11400	---	---	---	43	500	58
TOTAL	3968	---	67800.0	2230	---	20707.6	4636	---	66571.2

11048555 SAN DIEGO CREEK AT CAMPUS DRIVE, NEAR IRVINE, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	43	450	52	27	250	18	25	650	44
2	47	400	51	29	300	23	27	640	47
3	47	370	47	30	350	28	27	630	46
4	32	200	17	28	400	30	22	620	37
5	26	116	8.1	28	450	34	23	610	38
6	21	100	5.7	31	480	40	21	580	33
7	24	90	5.8	30	500	41	23	560	35
8	22	80	4.8	30	540	44	25	540	36
9	21	70	4.0	30	550	45	27	520	38
10	19	65	3.3	26	600	42	30	500	41
11	24	100	6.5	25	630	43	32	480	41
12	24	154	10	26	660	46	39	460	48
13	35	155	15	24	690	45	35	440	42
14	35	160	15	27	720	52	36	420	41
15	33	160	14	27	750	55	33	400	36
16	30	164	13	26	780	55	31	380	32
17	31	212	18	24	800	52	28	360	27
18	31	200	17	25	832	56	26	340	24
19	30	190	15	28	840	64	26	320	22
20	29	180	14	26	840	59	27	300	22
21	23	170	11	24	850	55	26	280	20
22	23	160	9.9	26	860	60	26	260	18
23	22	160	9.5	28	863	65	26	240	17
24	22	157	9.3	32	1000	86	25	225	15
25	24	160	10	39	1190	125	25	200	14
26	21	170	9.6	32	1000	86	25	150	10
27	24	180	12	31	900	75	24	135	8.7
28	27	190	14	29	800	63	25	140	9.5
29	28	200	15	29	700	55	25	150	10
30	26	220	15	28	677	51	26	160	11
31	---	---	---	27	660	48	---	---	---
TOTAL	844	---	451.5	872	---	1641	816	---	863.2

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	26	400	28	25	996	67	20	700	38
2	26	500	35	25	1000	68	20	650	35
3	27	699	51	24	1020	66	21	600	34
4	27	690	50	24	1040	67	21	550	31
5	27	680	50	24	1060	69	21	500	28
6	28	670	51	24	1100	71	21	460	26
7	28	668	51	24	1300	84	22	450	27
8	28	400	30	24	1500	97	22	400	24
9	29	300	23	24	1740	113	22	400	24
10	29	203	16	24	1960	127	22	400	24
11	29	676	53	24	2000	130	23	400	25
12	29	700	55	24	2320	150	23	400	25
13	28	750	57	24	2350	152	23	400	25
14	28	800	60	24	2370	154	24	400	26
15	27	850	62	24	2390	155	24	400	26
16	26	900	63	23	2400	149	24	400	26
17	26	1000	70	22	2410	143	25	400	27
18	25	1110	75	22	2420	144	25	400	27
19	25	1000	68	21	2430	138	25	400	27
20	25	970	65	20	2200	119	25	400	27
21	24	920	60	20	2000	108	24	400	26
22	24	900	58	19	1800	92	23	400	25
23	24	860	56	19	1500	77	23	400	25
24	24	850	55	19	1300	67	22	400	24
25	23	845	52	19	1140	58	21	400	23
26	24	850	55	19	1000	51	20	400	22
27	24	860	56	19	950	49	22	600	36
28	24	870	56	19	900	46	23	800	50
29	24	880	57	19	850	44	24	900	58
30	24	900	58	19	800	41	25	1000	68
31	25	950	64	20	750	41	---	---	---
TOTAL	807	---	1640	681	---	2937	680	---	909
YEAR	18636.0		184208.7						

11048555 SAN DIEGO CREEK AT CAMPUS DRIVE, NEAR IRVINE, CA--Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1977	543.00	368.00	159	527
NOVEMBER ...	443.00	247.10	113	360
DECEMBER ...	1553.00	10462.50	759	11200
JANUARY 1978	7816.00	125580.10	4700	130000
FEBRUARY ...	6434.00	106722.00	3860	111000
MARCH	8008.00	131094.00	4860	136000
APRIL	1322.00	11209.30	625	11800
MAY	566.00	652.00	171	823
JUNE	711.00	1727.00	252	1980
JULY	797.00	1524.00	295	1820
AUGUST	714.00	954.60	249	1200
SEPTEMBER ..	1375.00	13356.40	667	14000
TOTAL	30282.00	403897.00	16710	420710

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1978	625.00	313.30	201	514
NOVEMBER ...	1372.00	12357.60	649	13000
DECEMBER ...	1105.00	8017.30	500	8520
JANUARY 1979	3968.00	67800.00	2290	70100
FEBRUARY ...	2230.00	20707.60	1180	21900
MARCH	4636.00	66571.20	2690	69300
APRIL	844.00	451.50	322	773
MAY	872.00	1641.00	337	1980
JUNE	816.00	863.20	309	1170
JULY	807.00	1640.00	300	1940
AUGUST	681.00	2937.00	230	3170
SEPTEMBER ..	680.00	909.00	234	1140
TOTAL	18636.00	184208.70	9242	193507

11048555 SAN DIEGO CREEK AT CAMPUS DRIVE, NEAR IRVINE, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM
DEC									
12...	0910	7.5	15	173	7.0	--	--	--	--
JAN									
05...	1650	13.0	1630	10200	44900	63	72	83	92
31...	1445	11.5	105	2860	811	38	49	54	59
MAR									
28...	0950	14.5	1120	4870	14700	42	48	56	66

DATE	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
DEC								
12...	--	93	--	94	--	99	100	--
JAN								
05...	95	--	98	--	100	--	--	--
31...	--	63	--	70	--	87	98	100
MAR								
28...	--	82	--	92	--	99	100	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPERATURE, WATER (DEG C)	NUMBER OF SAMPLING POINTS	STREAMFLOW, INSTANTANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM
MAR									
28...	1340	15.0	1	146	11	43	93	100	--
28...	1345	15.0	1	146	27	69	94	98	100
28...	1350	15.0	1	146	2	19	93	100	--
28...	1355	15.0	1	146	2	17	94	100	--
28...	1405	15.0	1	146	16	52	96	99	100

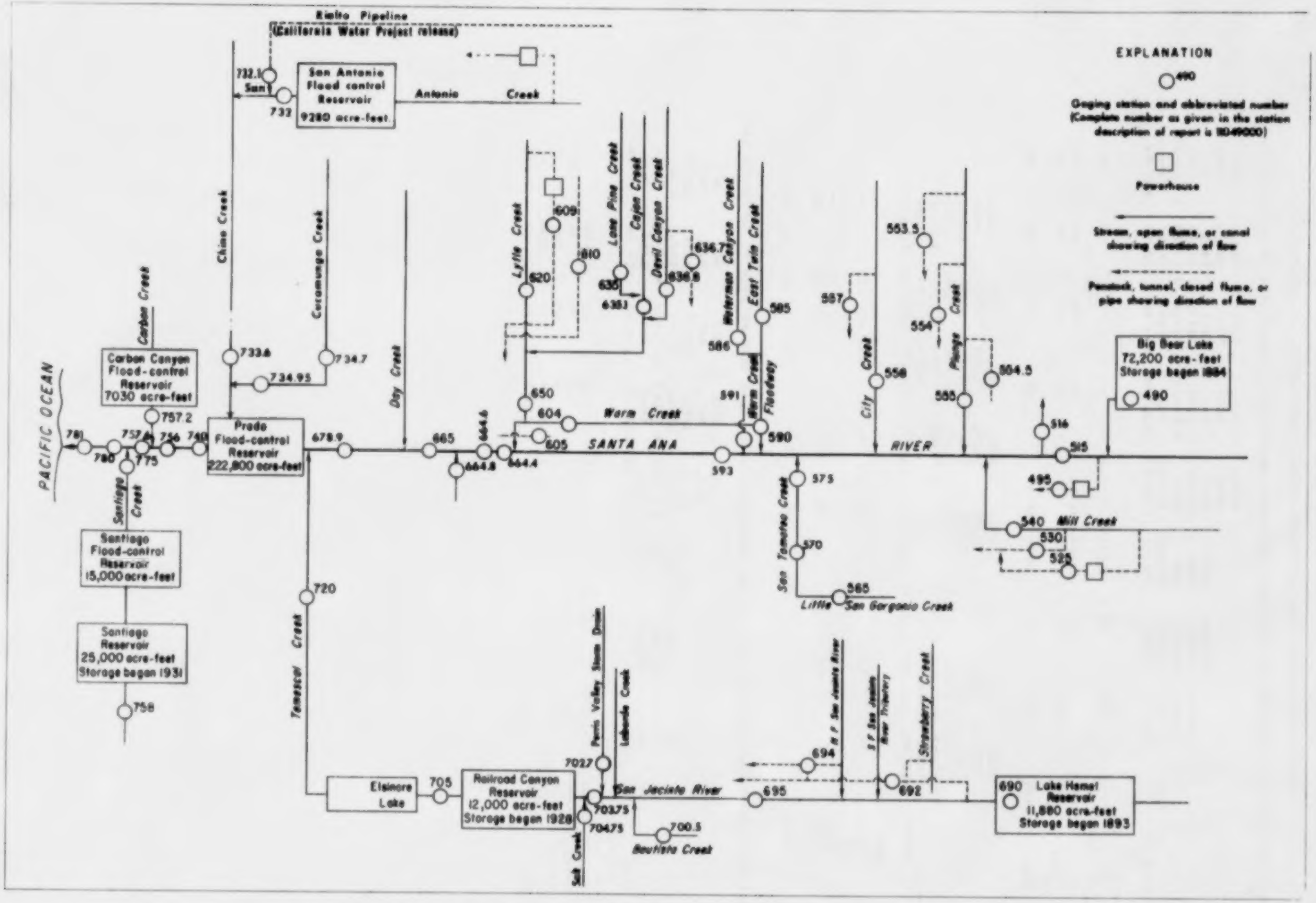

EXPLANATION
490
Gaging station and abbreviated number (Complete number as given in the station description of report is 11049000)
Powerhouse
Stream, open flume, or canal showing direction of flow
Penstock, tunnel, closed flume, or pipe showing direction of flow
Rialto Pipeline
(California Water Project release)
San Antonio Flood control Reservoir 9280 acre-feet.
Antonio Creek
San
732.1
732
Chino Creek
Cucamunga Creek
733.6
734.7
734.95
Carbon Creek
Carbon Canyon Flood-control Reservoir 7030 acre-feet
757.2
PACIFIC OCEAN
781
780
757.4
756
775
740
Prado Flood-control Reservoir 222,800 acre-feet
Santiago Creek
Santiago Flood-control Reservoir 15,000 acre-feet
Santiago Reservoir 25,000 acre-feet Storage began 1931
758
678.9
Day Creek
665
664.6
664.8
664.4
605
Lytle Creek
609
610
620
650
604
Warm Creek
Lone Pine Creek
Cajon Creek
Devil Canyon Creek
636
636.1
636.7
636.8
Waterman Canyon Creek
East Twin Creek
586
585
591
Warm Creek
Floodway
590
SANTA ANA
593
RIVER
City Creek
557
558
553.5
554
Plunge Creek
555
554.5
516
515
Big Bear Lake 72,200 acre-feet Storage began 1884
490
495
540
Mill Creek
530
525
575
San Timoteo Creek
570
565
Little San Gorgonio Creek
720
Temescal Creek
Elsinore Lake
705
Railroad Canyon Reservoir 12,000 acre-feet Storage began 1928
7027
Perris Valley Storm Drain
Laborde Creek
Salt Creek
70375
70475
San Jacinto River
700.5
Bautista Creek
695
694
N F San Jacinto River
S F San Jacinto River Tributary
692
Strawberry Creek
690
Lake Hemet Reservoir 11,880 acre-feet Storage began 1893

Figure 5.-- Schematic diagram showing diversions and storage in Santa Ana River basin.

11049000 BIG BEAR LAKE NEAR BIG BEAR LAKE, CA

LOCATION.--Lat 34°14'33", long 116°58'33", in SW¼ sec.22, T.2 N., R.1 W., San Bernardino County, Hydrologic Unit 18070203, at Big Bear Lake Dam on Bear Creek, 4 mi (6 km) west of town of Big Bear Lake, and 7.5 mi (12.1 km) upstream from mouth.

DRAINAGE AREA.--72.2 mi^2 (187.0 km^2), including Baldwin Lake drainage.

PERIOD OF RECORD.--October 1950 to current year in reports of Geological Survey. February 1884 to September 1950 in files of Bear Valley Mutual Water Co.

GAGE.--Nonrecording gage. Datum of gage is 6,670.9 ft (2,033.29 m) National Geodetic Vertical Datum of 1929 (levels by Bear Valley Mutual Water Co.). Prior to 1912 at old dam 200 ft (61 m) upstream at same datum; spillway at gage height 52.4 ft (15.97 m).

REMARKS.--Lake is formed by multiple-arch concrete dam, completed in 1912, replacing existing lower dam built in 1884; storage began in spring of 1884. Capacity (based on July 1977 resurvey, new capacity table put into use August, 1977) 73,320 acre-ft (90.4 hm^3) at elevation 6,743.3 ft (2,055.36 m), top of dam. No dead storage. Water used for irrigation only. See schematic diagram of Santa Ana River basin.

COOPERATION.--Record of contents were furnished by Big Bear Municipal Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents unknown, lake spilled in 1916, 1917, 1922, 1923, 1938, 1939, 1969, 1970; lake dry October, November 1898, August to November 1899, October, November 1904.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 73,320 acre-ft (90.4 hm^3) May 8; minimum contents observed, 61,380 acre-ft (75.7 hm^3) Jan. 2.

MONTHEND CONTENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	61,380	--
Oct. 31	60,000	-1,380
Nov. 30	60,460	+460
Dec. 31	61,380	+920
CAL YR 1978	--	+28,000
Jan. 31	63,010	+1,630
Feb. 28	65,130	+2,120
Mar. 31	69,920	+4,790
Apr. 30	72,240	+2,320
May 31	72,110	-130
June 30	70,650	-1,460
July 31	69,670	-980
Aug. 31	67,990	-1,680
Sept. 30	66,310	-1,680
WTR YR 1979	--	+4,930

11051500 SANTA ANA RIVER NEAR MENTONE, CA

LOCATION.--Lat 34°06'30", long 117°05'59", in NE¼SW¼SW¼ sec.4, T.1 S., R.2 W., San Bernardino County, Hydrologic Unit 18070203, on right bank at spreading ground diversion near mouth of canyon, 1.6 mi (2.6 km) upstream from Mill Creek, 3.2 mi (5.1 km) northeast of Mentone, and 16 mi (26 km) downstream from Big Bear Lake.
DRAINAGE AREA.--210 mi² (544 km²), including area tributary to Baldwin Lake at head of Bear Valley.
PERIOD OF RECORD.--July 1896 to current year. Prior to October 1914, records for river only not equivalent owing to Greenspot pipeline diversion between sites and exclusion of discharge from Warm Springs Canyon. Monthly discharge only for January 1910, January and February 1916 published in WSP 1315-B.
GAGE.--Three water-stage recorders. Main gage on right bank of river, canal gage on powerhouse diversion, and since 1970 supplementary gage on left bank of river. Altitude of main and supplementary gages is 1,950 ft (594 m), from topographic map. Prior to Sept. 2, 1917, nonrecording gages at several sites within 1.5 mi (2.4 km) upstream at various datums. Sept. 3, 1917, to May 27, 1969, water-stage recorder at site 0.2 mi (0.3 km) upstream at different datum. Canal gage at different datum.
REMARKS.--Records poor. Flow partly regulated by Big Bear Lake (station 11049000) 16 mi (26 km) upstream. For records of combined discharge of Santa Ana River and Southern California Edison Co.'s canal below powerplant No. 2, which diverts above station, see following page. Prior to Oct. 1, 1952, and since Apr. 26, 1976, Bear Valley Mutual Water Co. pumps water into channel above canal gage. See schematic diagram of Santa Ana River basin.
AVERAGE DISCHARGE.--River only: 65 years (water years 1915-79), 33.6 ft³/s (0.952 m³/s), 24,340 acre-ft/yr (30.01 hm³/yr).
Combined river and canal: 83 years, 81.1 ft³/s (2.297 m³/s), 58,760 acre-ft/yr (72.5 hm³/yr).
EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 52,300 ft³/s (1,480 m³/s) Mar. 2, 1938, gage height, 14.3 ft (4.36 m), site and datum then in use, on basis of slope-area measurement of maximum flow; no flow at times in some years.
Combined river and canal: Maximum discharge, 52,300 ft³/s (1,480 m³/s) Mar. 2, 1938; minimum daily, 7.4 ft³/s (0.21 m³/s) Sept. 21, 1971.
EXTREMES OUTSIDE PERIOD OF RECORD.--Combined river and canal: Flood of Feb. 23, 1891, 53,700 ft³/s (1,520 m³/s), from notes furnished by F. C. Finkle, consulting engineer, Los Angeles.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.25 m³/s) and maximum (*):

Date	Time	River Discharge (ft³/s)	River Discharge (m³/s)	Gage height (ft)	Gage height (m)	Combined River and Diversion Discharge (ft³/s)	Combined River and Diversion Discharge (m³/s)
Dec. 18	0400	575	16.3	3.75	1.143	603	17.1
Jan. 6	0200	520	14.7	3.40	1.036	589	16.7
Feb. 21	0700	538	15.2	3.84	1.170	623	17.6
Mar. 27	1900	*1,680	47.6	4.90	1.494	*1,685	47.7
Apr. 20	0300	1,400	39.6	4.65	1.417	1,410	39.9
May 8	1430	824	23.3	4.03	1.228	828	23.4

River only: Minimum daily discharge, 3.7 ft³/s (0.10 m³/s) Oct. 14.
Combined river and diversion: Minimum daily discharge, 51 ft³/s (1.44 m³/s) Nov. 7, 8, and 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	5.5	22	9.3	218	77	400	165	59	29	5.5	9.3
2	6.4	5.5	23	10	173	70	302	165	59	29	11	9.3
3	6.4	5.5	9.9	12	125	71	213	143	58	26	5.5	21
4	5.5	4.8	8.3	9.9	131	70	163	146	58	26	5.1	13
5	5.2	4.8	9.3	107	137	70	156	153	58	28	5.1	12
6	4.8	4.8	16	296	131	71	168	137	58	23	5.1	10
7	4.8	4.4	9.9	125	128	71	168	159	61	21	7.3	9.3
8	4.8	4.0	12	76	131	71	165	663	58	19	5.5	6.4
9	4.8	4.0	7.9	57	121	71	178	550	52	16	5.1	6.0
10	4.8	22	15	30	69	68	219	396	46	14	4.8	6.0
11	4.4	58	7.8	12	61	73	195	275	39	12	5.1	5.5
12	4.0	60	6.4	30	53	75	198	240	38	11	5.5	6.0
13	4.0	25	6.4	73	49	95	195	220	39	9.9	5.5	6.4
14	3.7	20	6.4	10	182	78	195	235	40	9.9	5.5	6.8
15	4.0	8.3	6.4	20	161	71	208	208	42	8.8	5.1	6.8
16	4.0	13	6.4	36	146	80	213	200	41	7.8	6.4	6.4
17	4.0	12	30	36	125	78	213	192	42	7.8	43	6.8
18	4.0	12	305	49	88	73	360	184	43	7.3	24	6.8
19	4.4	14	151	69	80	75	1030	176	42	7.8	75	6.8
20	5.1	14	107	27	57	72	1230	168	42	21	23	6.8
21	4.4	20	114	23	237	65	1050	160	39	21	14	7.3
22	4.4	43	114	12	170	65	614	152	39	14	12	7.3
23	4.4	16	61	10	109	68	188	152	39	10	12	7.3
24	4.8	14	43	9.9	80	70	135	144	35	9.3	16	8.3
25	4.8	13	27	9.9	80	68	127	136	34	7.3	16	8.3
26	5.1	11	20	26	80	73	128	128	27	6.0	16	8.3
27	4.8	9.3	14	107	76	721	168	120	25	6.4	10	8.3
28	4.4	15	12	110	75	1300	163	112	24	6.8	9.3	8.3
29	4.8	8.8	11	101	---	894	165	104	25	5.5	9.3	8.3
30	5.1	17	10	140	---	527	168	96	28	5.5	9.3	8.8
31	5.5	---	9.9	201	---	432	---	87	---	5.5	9.3	---
TOTAL	148.0	468.7	1201.9	1844.0	3273	5763	9074	6140	1290	430.6	391.3	247.9
MEAN	4.77	15.6	38.8	59.5	117	186	302	198	43.0	13.9	12.6	8.26
MAX	6.4	60	305	296	237	1300	1230	663	61	29	75	21
MIN	3.7	4.0	6.4	9.3	49	65	127	87	24	5.5	4.8	5.5
AC-FT	294	930	2380	3660	6490	11430	18000	12180	2560	854	776	492

CAL YR 1978 TOTAL 37220.1 MEAN 102 MAX 1980 MIN 3.7 AC-FT 73830
WTR YR 1979 TOTAL 30272.6 MEAN 82.9 MAX 1300 MIN 3.7 AC-FT 60050

11051500 SANTA ANA RIVER NEAR MENTONE, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF SANTA ANA RIVER AND SOUTHERN
CALIFORNIA EDISON CO.'S CANAL NEAR MENTONE, CA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	57	96	64	289	146	405	219	132	99	65	77
2	59	57	85	63	242	139	307	215	132	101	68	73
3	59	55	66	65	192	140	233	193	131	97	65	76
4	59	54	69	64	199	140	233	191	131	97	64	82
5	58	54	81	170	206	139	226	202	131	98	64	80
6	58	53	88	371	202	140	238	197	130	93	69	79
7	58	51	77	198	198	142	238	209	131	90	74	78
8	57	51	75	144	202	143	235	678	127	88	68	76
9	57	51	79	123	193	143	248	554	121	86	65	76
10	56	68	84	97	139	139	288	394	115	84	63	75
11	54	110	85	85	135	144	265	279	110	83	66	78
12	54	107	83	110	129	145	268	243	109	81	70	78
13	54	82	82	95	126	166	265	223	112	81	69	81
14	54	79	83	83	266	148	265	254	112	82	66	82
15	54	64	83	98	239	141	278	258	116	80	66	77
16	55	68	82	110	215	150	283	262	115	77	80	67
17	55	67	93	110	199	151	233	255	114	77	122	66
18	55	66	319	172	167	146	365	249	115	76	103	66
19	56	67	157	139	157	145	1040	242	114	77	154	66
20	58	66	112	97	131	145	1240	239	114	95	101	65
21	58	74	147	92	320	137	1060	238	112	91	92	63
22	56	93	173	80	247	138	639	231	111	80	88	62
23	54	71	125	76	179	140	243	227	112	73	82	60
24	55	68	107	76	150	142	190	222	105	72	78	63
25	56	67	90	76	150	140	182	212	101	70	79	61
26	56	64	82	87	150	143	183	201	99	68	81	59
27	55	63	75	177	145	791	223	194	97	67	80	57
28	54	75	73	184	144	1300	218	180	94	66	79	57
29	55	78	71	174	---	899	220	163	95	67	81	56
30	56	92	68	212	---	532	223	158	100	65	78	58
31	57	---	65	272	---	437	---	139	---	65	78	---
TOTAL	1742	2072	3055	3964	5311	7691	10534	7721	3438	2526	2458	2094
MEAN	56.2	69.1	98.5	128	190	248	351	249	115	81.5	79.3	69.8
MAX	60	110	319	371	320	1300	1240	678	132	101	154	82
MIN	54	51	65	63	126	137	182	139	94	65	63	56
AC-FT	3460	4110	6060	7860	10530	15260	20890	15310	6820	5010	4880	4150

CAL YR 1978 TOTAL 55540 MEAN 152 MAX 1930 MIN 50 AC-FT 110200
WTR YR 1979 TOTAL 52606 MEAN 144 MAX 1300 MIN 51 AC-FT 104300

11054000 MILL CREEK NEAR YUCAIPA, CA

LOCATION.--Lat 34°05'27", long 117°02'12", in NW¼NE¼NE¼ sec.13, T.1 S., R.2 W., San Bernardino County, Hydrologic Unit 18070203, on left bank 50 ft (15 m) downstream from bridge on State Highway 38, 3.9 mi (6.3 km) north of Yucaipa, and 5.3 mi (8.5 km) upstream from mouth.

DRAINAGE AREA.--42.4 mi² (110 km²).

PERIOD OF RECORD.--January 1919 to September 1938, October 1947 to current year. Monthly figures only for April and May 1923, published in WSP 1315-B. Prior to October 1954, published as "near Craftonville."

GAGE.--Water-stage recorder on creek; water-stage recorder and sharp-crested weir on power canal No. 1; water-stage recorder and Parshall flume on power canals Nos. 2 and 3. Datum of creek gage is 2,916.36 ft (888.907 m) Southern California Edison Co. datum. Canals are all at different datums. See WSP 1735 for history of changes prior to Mar. 2, 1938.

REMARKS.--Records good. No regulation above station. Mill Creek power canals Nos. 1, 2, and 3 divert from points 100 ft (30 m), 3 mi (5 km), and 6 mi (10 km) above station, respectively. Combined flow of Mill Creek and Mill Creek power canals Nos. 1, 2, and 3 is given on following page. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--Creek only: 51 years (water years 1920-38, 1948-79), 15.3 ft³/s (0.433 m³/s), 11,080 acre-ft/yr (13.7 hm³/yr).
Combined creek and canals: 51 years, 36.3 ft³/s (1.03 m³/s), 26,300 acre-ft/yr (32.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 35,400 ft³/s (1,000 m³/s) Jan. 25, 1969, gage height, 16.8 ft (5.12 m), from floodmark, from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of two field estimates at gage height 14.5 ft (4.42 m) and slope-area measurement of maximum flow; no flow at times in some years.
Combined creek and canals: Maximum discharge, 35,400 ft³/s (1,000 m³/s) Jan. 25, 1969; minimum daily, 2.7 ft³/s (0.08 m³/s) Feb. 23, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 100 ft³/s (2.83 m³/s) and maximum (*), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurements made at gage heights 10.75 ft (3.277 m) and 10.9 ft (3.32 m):

Date	Time	Creek Discharge (ft³/s)	Creek Discharge (m³/s)	Gage height (ft)	Gage height (m)	Combined Creek and Canals Discharge (ft³/s)	Combined Creek and Canals Discharge (m³/s)
Dec. 18	0100	148	4.19	8.32	2.536	172	4.87
Mar. 27	1530	202	5.72	8.61	2.624	231	6.54
Aug. 6	1530	*290	8.21	9.00	2.743	*308	8.72
Aug. 16	1900	138	3.91	8.25	2.515	165	4.67

Creek only: Minimum daily discharge, 0.03 ft³/s (0.001 m³/s) Sept. 15, 20, 28-30.
Combined creek and canals: Minimum daily discharge, 30 ft³/s (0.85 m³/s) Aug. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	.44	3.9	.90	6.1	10	41	76	70	21	1.6	4.4
2	1.7	.44	2.8	.90	4.7	8.4	39	86	67	20	1.6	2.9
3	1.6	.40	1.8	.90	4.1	6.1	39	79	65	19	1.7	2.9
4	1.6	.36	1.7	.90	3.7	5.7	39	75	62	19	1.6	3.9
5	1.5	.36	2.1	14	4.2	5.7	40	76	61	19	2.5	3.2
6	1.5	.32	2.7	27	3.3	6.1	42	76	58	17	31	2.5
7	1.4	.32	1.3	7.0	3.2	7.9	44	76	58	15	26	2.5
8	1.9	.29	1.3	2.7	3.2	8.9	44	83	56	15	25	2.5
9	1.9	.29	1.2	2.3	3.0	10	46	73	52	14	25	2.3
10	1.2	19	.96	2.1	2.9	10	43	63	50	11	15	2.4
11	1.1	50	.96	2.0	2.8	11	41	59	49	11	12	2.9
12	1.1	13	.96	2.1	2.7	9.9	42	60	46	9.9	10	.07
13	1.0	3.7	.96	1.9	2.7	23	48	58	45	6.7	6.0	.06
14	.96	3.3	.90	2.1	7.1	18	51	62	43	5.7	5.0	.04
15	.96	3.2	.84	2.5	5.5	13	58	67	41	5.7	6.0	.03
16	1.0	3.0	2.0	2.1	5.1	12	62	74	39	5.5	17	.04
17	1.1	3.0	6.1	2.0	4.2	12	64	73	39	5.3	9.0	.14
18	1.1	1.8	77	2.2	3.2	12	58	73	39	5.5	5.0	.06
19	1.0	.90	18	1.8	3.2	14	57	79	38	5.9	15	.09
20	1.1	.90	5.4	1.7	3.2	15	55	79	36	14	36	.03
21	1.0	2.4	2.1	1.6	20	15	55	82	34	12	24	.06
22	.96	2.2	1.7	1.6	14	14	56	85	33	8.6	9.9	.09
23	1.1	1.1	1.6	1.6	11	13	58	89	33	5.5	9.9	.06
24	.96	1.1	1.3	1.3	6.5	13	58	90	29	4.9	8.8	.06
25	.90	.96	1.1	1.1	6.1	13	58	81	28	4.1	7.7	.06
26	.98	.96	1.1	1.0	5.9	12	63	76	26	2.8	6.6	.06
27	1.3	1.3	1.1	.96	5.5	96	74	77	25	2.5	5.5	.06
28	2.3	1.8	1.0	1.0	5.3	125	74	79	24	2.3	4.6	.03
29	.94	1.7	.96	.96	---	69	74	76	24	2.8	3.4	.03
30	.44	1.7	.90	.96	---	51	79	71	23	4.1	3.6	.03
31	.49	---	.90	6.4	---	43	---	71	---	2.1	5.1	---
TOTAL	37.72	120.26	146.64	97.58	152.4	672.7	1602	2324	1293	296.9	341.1	33.50
MEAN	1.22	4.01	4.73	3.15	5.44	21.7	53.4	75.0	43.1	9.58	11.0	1.12
MAX	2.3	50	77	27	28	125	79	90	70	21	36	4.4
MIN	.44	.29	.84	.90	2.7	5.7	39	58	23	2.1	1.6	.03
AC-FT	75	238	291	194	302	1330	3180	4610	2560	589	677	66

CAL YR 1978 TOTAL 52339.50 MEAN 143 MAX 1760 MIN .29 AC-FT 103800
WTR YR 1979 TOTAL 7117.78 MEAN 19.5 MAX 125 MIN .03 AC-FT 14120

11054000 MILL CREEK NEAR YUCAIPA, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF MILL CREEK AND MILL CREEK POWER CANALS NOS. 1, 2, AND 3 NEAR YUCAIPA, CA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	34	41	36	43	53	81	114	108	57	40	36
2	40	34	40	34	43	50	78	113	105	56	40	37
3	40	33	38	34	41	48	77	108	103	56	39	36
4	40	32	36	34	41	48	77	115	100	55	39	37
5	39	32	35	53	39	48	78	116	100	55	41	36
6	38	32	34	62	40	48	80	116	97	54	59	37
7	38	32	33	44	40	50	82	116	97	53	36	36
8	38	32	34	41	41	51	82	122	95	52	39	36
9	38	32	33	40	40	52	84	106	91	52	38	34
10	38	47	33	40	41	52	81	94	88	50	32	34
11	37	62	33	41	42	54	79	98	85	50	40	34
12	37	46	32	43	42	53	79	99	84	48	37	33
13	37	40	32	41	42	60	86	97	84	49	39	33
14	37	43	32	40	45	55	90	101	82	49	39	34
15	37	41	32	43	46	57	97	106	79	48	37	33
16	37	39	33	42	44	55	101	113	77	48	45	33
17	36	38	43	42	43	56	103	112	78	47	34	32
18	36	38	101	42	43	55	97	112	76	47	32	34
19	36	39	51	41	44	57	96	118	74	47	36	34
20	38	39	42	40	39	57	95	118	74	57	57	35
21	38	40	41	39	59	57	95	121	72	50	45	33
22	36	39	41	39	56	55	95	113	70	44	37	33
23	35	40	41	38	52	54	97	109	70	49	37	32
24	36	40	39	37	49	53	97	111	67	46	40	33
25	35	38	40	39	48	55	97	119	66	45	41	32
26	35	38	39	37	47	54	103	114	64	45	35	32
27	33	36	39	39	48	121	114	115	61	45	30	32
28	33	36	38	37	47	149	114	117	61	43	38	31
29	34	35	37	36	---	102	114	114	60	42	38	31
30	34	36	37	32	---	87	119	109	59	42	39	31
31	34	---	36	43	---	81	---	109	---	41	37	---
TOTAL	1140	1143	1216	1249	1245	1927	2768	3445	2427	1522	1216	1014
MEAN	36.8	38.1	39.2	40.3	44.5	62.2	92.3	111	80.9	49.1	39.2	33.8
MAX	40	62	101	62	59	149	119	122	108	57	59	37
MIN	33	32	32	32	39	48	77	94	59	41	30	31
AC-FT	2260	2270	2410	2480	2470	3820	5490	6830	4810	3020	2410	2010

CAL YR 1978 TOTAL 62988 MEAN 173 MAX 1740 MIN 13 AC-FT 124900
WTR YR 1979 TOTAL 20312 MEAN 55.6 MAX 149 MIN 30 AC-FT 40290

11055500 PLUNGE CREEK NEAR EAST HIGHLANDS, CA

LOCATION.--Lat 34°07'06", long 117°08'27", in SW¼NE¼NE¼ sec.1, T.1 S., R.3 W., San Bernardino County, Hydrologic Unit 18070203, on left bank at mouth of canyon at crossing of North Fork ditch siphon, and 1.8 mi (2.9 km) northeast of East Highlands.

DRAINAGE AREA.--16.9 mi² (43.8 km²).

PERIOD OF RECORD.--January 1919 to current year; combined records of creek and diversions, March 1951 to current year.

GAGE.--Water-stage recorder on creek. Since March 1951 water-stage recorder and weir on upper diversion; water-stage recorder and concrete-lined canal on middle diversion; crest-stage gage and sharp-crested weir on lower diversion. Altitude of creek gage is 1,590 ft (485 m), from topographic map. Prior to Oct. 1, 1969, creek gage at datum 4.00 ft (1.219 m) higher. Diversions are all at different datums.

REMARKS.--Records fair. No regulation above station. Diversion from Alder Creek to Upper Plunge Creek area was active 1904-67. Diversions for irrigation are made at sites 0.5 mi (0.8 km), 1.0 mi (1.6 km), and 2.5 mi (4.0 km) above station. Water has been diverted above station for irrigation during entire period of record. Combined discharge of Plunge Creek and upper, middle, and lower diversions is given on following page. No flow in lower diversion since May 29, 1966. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--Creek only: 60 years, 6.42 ft³/s (0.182 m³/s), 4,650 acre-ft/yr (5.73 hm³/yr).
Combined creek and diversions: 28 years, 8.18 ft³/s (0.232 m³/s), 5,930 acre-ft/yr (7.31 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 5,340 ft³/s (151 m³/s) Mar. 2, 1938, on basis of slope-area measurement of maximum flow; no flow for part of most years.
Combined creek and diversions: Maximum discharge, 4,770 ft³/s (135 m³/s) Dec. 6, 1966; no flow Nov. 12, 1964, Sept. 29, 1965.

EXTREMES FOR CURRENT YEAR.--Creek only: Maximum discharge, 350 ft³/s (9.91 m³/s) Mar. 27 (1400 hrs), gage height, 3.90 ft (1.189 m), no other peak above base of 200 ft³/s (5.66 m³/s); minimum daily, 0.14 ft³/s (0.004 m³/s) Oct. 23, Aug. 18-19, Sept. 14.
Combined creek and diversions: Maximum discharge, 350 ft³/s (9.91 m³/s) Mar. 27 (1400 hrs); minimum daily, 1.3 ft³/s (0.037 m³/s) Sept. 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	.43	7.7	7.2	32	34	66	13	4.5	.90	.18	.21
2	.43	.43	7.0	6.9	21	30	53	17	4.7	.90	.21	.21
3	.43	.39	6.5	6.7	13	27	49	13	4.7	.89	.24	.18
4	.43	.35	5.0	6.7	9.5	26	42	10	4.5	.89	.24	.18
5	.52	.31	5.0	23	7.7	27	40	10	3.9	.88	.24	.16
6	.47	.31	5.0	53	7.7	26	41	10	3.9	.88	.31	.18
7	.47	.27	5.0	21	7.7	28	39	11	4.3	.87	.31	.18
8	.43	.31	5.0	9.2	7.7	26	37	14	3.7	.87	.31	.18
9	.39	.31	5.0	6.2	7.7	25	35	13	3.2	.87	.31	.18
10	.43	18	5.0	4.9	7.4	23	32	11	2.9	.57	.31	.21
11	.57	17	5.0	4.9	7.2	24	30	10	2.4	.35	.35	.24
12	.88	9.8	4.5	4.9	6.4	25	29	9.5	2.1	.35	.47	.21
13	.88	7.2	4.5	4.1	6.2	28	29	9.8	1.3	.43	.43	.16
14	.81	6.9	4.5	3.7	17	32	28	9.8	1.2	.57	.43	.14
15	.74	4.7	4.5	9.6	8.0	30	28	7.2	1.1	.57	.43	.16
16	.88	3.7	4.5	7.2	6.4	26	26	7.2	1.1	.52	.47	.18
17	1.0	5.1	28	8.3	5.3	27	25	7.2	1.1	.47	.35	.18
18	1.0	5.7	72	14	4.9	27	24	7.2	1.8	.43	.14	.21
19	1.0	4.5	33	7.2	4.7	41	23	7.2	2.1	.43	.14	.21
20	1.7	4.5	20	7.2	4.3	42	21	7.2	1.3	.81	.18	.24
21	1.6	8.5	17	7.2	58	41	20	7.4	1.2	.88	.18	.27
22	.95	9.2	16	7.2	63	39	19	7.2	1.2	.62	.21	.31
23	.14	6.4	15	7.2	46	35	19	7.2	1.0	.62	.18	.35
24	.21	5.7	13	7.2	38	39	17	7.2	1.0	.62	.18	.39
25	.57	5.1	12	7.2	34	39	15	7.2	.95	.47	.18	.43
26	.57	4.9	10	7.2	31	40	14	6.4	.95	.21	.18	.43
27	.47	4.7	9.2	7.2	30	150	14	5.5	.93	.21	.18	.43
28	.31	4.5	8.9	7.2	25	156	14	5.5	.93	.18	.24	.39
29	.35	4.5	8.3	7.2	---	123	13	5.3	.92	.18	.27	.39
30	.35	4.5	7.7	8.4	---	105	13	5.3	.92	.18	.27	.43
31	.47	---	7.7	15	---	89	---	5.1	---	.18	.27	---
TOTAL	19.72	148.21	361.5	304.1	516.8	1430	855	273.6	65.80	17.80	8.39	7.62
MEAN	.64	4.94	11.7	9.81	18.5	46.1	28.5	8.83	2.19	.57	.27	.25
MAX	1.7	18	72	53	63	156	66	17	4.7	.90	.47	.43
MIN	.14	.27	4.5	3.7	4.3	23	13	5.1	.92	.18	.14	.14
AC-FT	39	294	717	603	1030	2840	1700	543	131	35	17	15

CAL YR 1978 TOTAL 9849.21 MEAN 27.0 MAX 580 MIN .03 AC-FT 19540
WTR YR 1979 TOTAL 4008.54 MEAN 11.0 MAX 156 MIN .14 AC-FT 7950

11055500 PLUNGE CREEK NEAR EAST HIGHLANDS, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF PLUNGE CREEK AND DIVERSIONS NEAR EAST HIGHLANDS, CA, WATER YEAR OCTOBER 1978 to SEPTEMBER 1979

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.9	7.7	7.2	32	34	66	16	8.5	4.3	2.6	2.4
2	3.0	2.8	7.0	6.9	21	30	53	21	8.8	4.5	2.7	2.2
3	2.4	2.6	6.5	6.7	13	28	49	17	8.7	4.7	2.5	2.1
4	2.3	2.5	5.0	6.7	9.5	26	42	14	8.4	4.6	2.5	2.0
5	2.4	2.4	5.0	23	7.7	27	40	14	7.7	4.5	2.5	2.0
6	2.4	2.4	5.0	53	7.7	26	41	14	7.8	4.4	2.9	1.9
7	2.4	2.3	5.0	21	7.7	28	39	15	8.5	4.2	2.8	1.8
8	2.2	2.2	5.0	9.2	7.7	26	37	19	7.6	4.0	2.6	1.8
9	2.2	2.3	5.0	6.2	7.7	25	35	18	6.5	3.6	2.6	1.6
10	2.2	20	5.0	4.9	7.4	23	32	15	6.3	3.5	2.4	1.5
11	2.3	19	5.0	4.9	7.2	24	30	14	6.0	3.9	2.7	1.5
12	2.5	12	4.5	4.9	6.4	25	29	14	5.5	3.6	3.2	1.5
13	2.5	10	4.5	4.1	6.2	28	29	14	5.3	3.6	3.4	1.5
14	2.4	10	4.6	3.7	17	32	28	14	5.3	3.7	3.2	1.4
15	2.3	7.4	4.7	9.6	8.0	30	28	12	5.0	3.6	2.8	1.5
16	2.6	6.2	5.0	7.2	6.4	26	26	12	5.1	3.3	2.7	1.4
17	2.7	7.4	31	8.3	5.3	27	25	12	5.2	3.3	2.8	1.5
18	2.7	7.9	72	14	4.9	27	24	11	5.9	3.3	2.7	1.4
19	2.7	6.7	33	7.2	4.7	41	23	12	6.1	3.2	3.0	1.3
20	4.2	5.3	20	7.2	4.3	42	22	12	5.1	5.3	3.2	1.3
21	4.1	8.6	17	7.2	58	41	21	12	5.0	5.1	3.1	1.4
22	3.2	9.2	16	7.2	63	39	20	12	4.9	3.9	2.7	1.4
23	2.3	6.4	15	7.2	46	35	21	12	4.7	3.6	2.5	1.5
24	2.6	5.7	13	7.2	38	39	19	12	4.7	3.2	2.4	1.6
25	3.4	5.1	12	7.2	34	39	18	12	4.6	3.3	2.5	1.7
26	3.2	4.9	10	7.2	31	40	17	11	4.4	3.2	2.5	1.6
27	2.8	4.7	9.2	7.2	30	150	17	9.7	4.3	3.0	2.4	1.6
28	2.4	4.5	8.9	7.2	25	156	17	9.7	4.4	2.9	2.4	1.6
29	2.5	4.5	8.3	7.2	---	123	16	9.5	4.3	2.8	2.7	1.7
30	2.9	4.5	7.7	8.4	---	105	16	9.5	4.3	2.7	2.8	1.9
31	3.2	---	7.7	15	---	89	---	9.3	---	2.7	2.6	---
TOTAL	83.3	192.4	365.3	304.1	516.8	1431	880	408.7	178.9	115.5	84.4	49.6
MEAN	2.69	6.41	11.8	9.81	18.5	46.2	29.3	13.2	5.96	3.73	2.72	1.65
MAX	4.2	20	72	53	63	156	65	21	8.8	5.3	3.4	2.4
MIN	2.2	2.2	4.5	3.7	4.3	23	16	9.3	4.3	2.7	2.4	1.3
AC-FT	165	382	725	603	1030	2840	1750	811	355	229	167	98

CAL YR 1978 TOTAL 10386.4 MEAN 28.5 MAX 580 MIN 2.1 AC-FT 20600
WTR YR 1979 TOTAL 4610.0 MEAN 12.6 MAX 156 MIN 1.3 AC-FT 9140

11055800 CITY CREEK NEAR HIGHLAND, CA

LOCATION.--Lat 34°08'38", long 117°11'16", in SE¼SW¼NW¼ sec.27, T.1 N., R.3 W., San Bernardino County, Hydrologic Unit 18070203, on right bank 0.6 mi (1.0 km) upstream from Highland Avenue, and 1.5 mi (2.4 km) northeast of Highland.

DRAINAGE AREA.--19.6 mi^2 (50.8 km^2).

PERIOD OF RECORD.--October 1919 to current year; combined records of creek and canal, June 1924 to current year.

GAGE.--Water-stage recorder on creek; water-stage recorder on canal. Altitude of creek gage is 1,580 ft (482 m), from topographic map. Prior to Mar. 1, 1939, at site 0.2 mi (0.3 km) downstream at different datum. Canal gage at different datum.

REMARKS.--Records fair. No regulation above station. City Creek Water Co.'s canal has diverted from point 0.5 mi (0.8 km) above station for irrigation throughout period of record. See schematic diagram of Santa Ana River basin. Combined discharge of City Creek and canal is given on following page.

AVERAGE DISCHARGE.--Creek only: 60 years, 9.03 ft^3/s (0.256 m^3/s), 6,540 acre-ft/yr (8.06 hm^3/yr).
Combined creek and canal: 55 years, 10.6 ft^3/s (0.300 m^3/s), 7,680 acre-ft/yr (9.47 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 7,000 ft^3/s (198 m^3/s) Feb. 25, 1969, gage height, 9.39 ft (2.862 m), from rating curve extended above 580 ft^3/s (16.4 m^3/s) on basis of slope-area estimate at gage height 8.83 ft (2.691 m); no flow for several months in some years.
Combined creek and canal: Maximum discharge, 7,000 ft^3/s (198 m^3/s) Feb. 25, 1969; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Creek only: Maximum discharge, 359 ft^3/s (10.2 m^3/s) Mar. 27, gage height, 5.04 ft (1.536 m); minimum daily, 0.77 ft^3/s (0.022 m^3/s) Sept. 12.
Combined creek and canal: Maximum discharge, 359 ft^3/s (10.2 m^3/s) Mar. 27; minimum daily, 2.1 ft^3/s (0.06 m^3/s) Sept. 15, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	5.7	13	10	28	31	65	19	12	3.8	2.8	1.9
2	3.6	5.5	15	9.6	26	27	58	24	12	4.2	2.6	1.5
3	3.4	13	11	9.2	22	26	53	19	12	4.4	2.5	1.3
4	3.4	4.0	10	9.2	20	26	49	18	11	4.4	2.5	1.1
5	3.2	4.0	9.6	27	18	24	46	17	11	4.2	2.3	1.1
6	3.0	3.6	9.6	47	19	24	104	17	11	4.2	2.5	1.0
7	3.0	2.6	9.2	26	21	23	42	17	13	3.8	2.5	.92
8	3.0	2.6	9.2	20	21	22	40	22	11	3.6	2.5	.84
9	2.8	2.8	9.2	17	21	21	40	18	10	3.6	2.3	.92
10	3.0	15	10	15	21	20	37	16	9.2	3.2	2.2	.84
11	1.3	31	12	15	20	19	36	16	8.9	3.2	2.5	.84
12	2.5	17	13	15	20	18	34	15	8.5	3.4	3.4	.77
13	2.2	13	13	14	19	22	33	14	7.8	3.0	4.0	1.0
14	2.2	12	13	13	24	22	31	14	6.6	3.2	3.4	1.2
15	2.3	10	13	18	22	19	30	14	6.0	3.0	2.8	1.2
16	2.5	9.2	13	20	20	19	29	15	6.6	2.6	2.6	1.2
17	2.5	8.9	29	18	18	22	29	15	7.8	2.5	2.6	1.3
18	2.3	9.2	66	26	17	24	28	14	8.2	2.6	2.3	1.2
19	2.3	8.5	43	21	16	35	26	14	7.2	2.6	2.3	1.2
20	3.6	8.5	24	18	16	33	25	15	6.3	4.7	2.5	1.2
21	3.6	12	20	17	61	32	24	15	6.0	4.7	2.5	1.3
22	3.2	13	17	16	62	32	24	14	5.7	3.6	2.0	1.3
23	3.2	10	16	15	48	30	23	13	5.5	3.4	1.7	1.2
24	5.2	12	15	14	39	28	22	13	5.2	3.2	1.5	1.5
25	5.7	11	15	14	35	27	22	13	4.9	3.0	1.5	1.5
26	5.5	10	14	12	30	26	21	13	4.4	3.2	1.4	1.4
27	4.9	9.2	13	12	27	144	21	13	4.2	3.0	1.4	1.4
28	4.4	8.9	12	11	25	167	20	13	4.0	2.8	1.5	1.5
29	4.2	8.5	12	11	---	122	19	13	3.8	2.8	2.0	1.6
30	4.9	8.5	11	10	---	92	19	13	3.8	2.8	2.3	1.9
31	5.7	---	10	16	---	76	---	5.5	---	2.8	2.0	---
TOTAL	106.2	289.2	499.8	516.0	736	1253	1050	471.5	233.6	105.5	72.9	37.13
MEAN	3.43	9.64	16.1	16.6	26.3	40.4	35.0	15.2	7.79	3.40	2.35	1.24
MAX	5.7	31	66	47	62	167	104	24	13	4.7	4.0	1.9
MIN	1.3	2.6	9.2	9.2	16	18	19	5.5	3.8	2.5	1.4	.77
AC-FT	211	574	991	1020	1460	2490	2080	935	463	209	145	74

CAL YR 1978 TOTAL 13949.10 MEAN 38.2 MAX 829 MIN 1.3 AC-FT 27670
WTR YR 1979 TOTAL 5370.83 MEAN 14.7 MAX 167 MIN .77 AC-FT 10650

11055800 CITY CREEK NEAR HIGHLAND, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF CITY CREEK AND CITY CREEK
WATER CO.'S CANAL NEAR HIGHLAND, CA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MEAN VALUFS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	5.7	13	10	28	31	65	19	12	5.4	3.7	3.6
2	5.2	5.5	15	9.6	26	27	58	24	12	6.0	3.8	3.1
3	5.0	13	11	9.2	22	26	53	19	12	6.3	3.9	2.7
4	5.0	4.3	10	9.2	20	26	49	18	11	6.3	3.8	2.5
5	4.8	4.3	9.6	27	18	24	46	17	11	6.0	3.6	2.6
6	4.5	4.2	9.6	47	19	24	104	17	11	6.0	4.0	2.4
7	4.6	3.4	9.2	27	21	23	42	18	13	5.5	3.9	2.3
8	4.6	3.5	9.2	21	21	22	40	23	11	5.2	3.8	2.2
9	4.3	3.9	9.2	18	21	21	40	19	10	5.1	3.6	2.3
10	4.4	17	10	16	21	20	37	17	9.6	4.7	3.4	2.2
11	2.6	32	12	15	20	19	36	17	9.3	4.7	3.9	2.2
12	3.7	17	13	15	20	18	34	16	8.9	4.9	5.2	2.2
13	3.3	13	13	14	19	22	33	15	8.4	4.5	6.0	2.2
14	3.3	12	13	13	24	22	31	15	7.8	4.7	5.2	2.2
15	3.5	10	13	18	22	19	30	14	7.7	4.4	4.4	2.1
16	3.8	9.2	13	20	20	19	29	15	8.4	3.8	4.0	2.1
17	3.9	8.9	29	16	18	22	29	15	9.8	3.7	4.0	2.3
18	3.8	9.2	66	26	17	24	28	14	10	3.8	3.7	2.2
19	3.8	8.5	43	21	16	35	26	14	9.1	3.8	3.9	2.2
20	5.4	8.5	24	18	16	33	25	15	8.2	6.4	4.2	2.2
21	5.6	12	20	17	61	32	24	15	7.9	6.4	4.2	2.3
22	5.1	13	17	16	62	32	24	14	7.6	5.1	3.5	2.4
23	4.3	10	16	15	48	30	23	13	7.4	4.8	3.0	2.2
24	5.2	12	15	14	39	28	22	13	7.1	4.5	2.7	2.6
25	5.7	11	15	14	35	27	22	13	6.7	4.2	2.7	2.7
26	5.5	10	14	12	30	26	21	13	6.1	4.4	2.7	2.5
27	4.9	9.2	13	12	27	144	21	13	5.9	4.2	2.8	2.5
28	4.4	8.9	12	11	25	167	20	13	5.6	3.8	3.0	2.6
29	4.2	8.5	12	11	---	122	19	13	5.4	3.8	3.8	2.8
30	4.9	8.5	11	10	---	92	19	13	5.4	3.8	4.1	3.2
31	5.7	---	10	16	---	76	---	5.5	---	3.8	3.7	---
TOTAL	140.2	296.2	499.8	520.0	736	1253	1050	479.5	265.3	150.0	118.2	73.6
MEAN	4.52	9.87	16.1	16.8	26.3	40.4	35.0	15.5	8.84	4.84	3.81	2.45
MAX	5.7	32	66	47	62	167	104	24	13	6.4	6.0	3.6
MIN	2.6	3.4	9.2	9.2	16	18	19	5.5	5.4	3.7	2.7	2.1
AC-FT	278	588	991	1030	1460	2490	2080	951	526	298	234	146

CAL YR 1978 TOTAL 14179.8 MEAN 38.8 MAX 830 MIN 2.6 AC-FT 28130
WTR YR 1979 TOTAL 5581.8 MEAN 15.3 MAX 167 MIN 2.1 AC-FT 11070

11056200 SANTA ANA RIVER AT WATERMAN AVENUE, AT SAN BERNARDINO, CA

LOCATION.--Lat 34°04'14", long 117°16'41", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, on downstream end of fifth pier from left bank of southbound Waterman Avenue bridge, 0.1 mi (0.16 km) upstream from San Timoteo Creek, and 2.7 mi (4.3 km) southeast of San Bernardino.

DRAINAGE AREA.--359 mi² (930 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1954 to December 1961, January 1964 to September 1970, October 1976 to current year. Prior to January 1964, published as "near San Bernardino". Records, except for extremes for October 1928 to September 1937 at site 1.6 miles (2.6 km) upstream, not equivalent as a result of discharge from Mission Ditch.

GAGE.--Water-stage recorder. Altitude of gage is 995 ft (303.3 m), from topographic map. Prior to Jan. 21, 1964, at different datum.

REMARKS.--Records poor. Stage-discharge relation indefinite during year. Flow partly regulated by Big Bear Lake (station 11049000). Natural flow of stream affected by ground-water withdrawals and diversions for domestic use and irrigation above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--16 years (water years 1955-61, 1965-70, 1977-79), 34.3 ft³/s (0.971 m³/s), 24,850 acre-ft/yr (30.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft³/s (566 m³/s), estimated, Jan. 25, 1969, gage height, 8.5 ft (2.59 m); no flow for most of each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 75,700 ft³/s (2,140 m³/s) Mar. 2, 1938, from combined discharge of Santa Ana River near Mentone, Mill Creek near Yucaipa, and Plunge Creek near East Highlands.

EXTREMES FOR CURRENT YEAR.--Peak discharges not determined due to indefinite stage-discharge relation; no flow at times during year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.60	3.0	.50	110	101	284	77	30	3.0	5.0	3.0
2	0	.60	5.0	0	80	73	223	61	24	3.0	5.0	3.0
3	0	.60	3.0	0	10	50	164	77	17	4.0	3.0	3.0
4	0	.60	2.0	0	5.0	40	76	82	14	5.0	4.0	3.0
5	0	.60	2.0	189	4.0	30	74	84	11	5.0	4.0	3.0
6	0	.60	2.0	44	3.0	20	78	72	8.0	3.0	5.0	3.0
7	0	.60	2.0	13	2.0	15	86	87	6.0	4.0	4.0	3.0
8	0	.60	2.0	5.0	2.0	10	101	129	4.0	4.0	4.0	3.0
9	0	2.0	2.0	2.0	2.0	8.0	122	131	3.0	5.0	3.0	3.0
10	0	5.0	2.0	1.0	3.0	6.0	132	94	2.0	5.0	3.0	3.0
11	0	39	2.0	0	2.0	5.0	147	104	1.0	3.0	5.0	2.5
12	0	69	1.0	0	3.0	5.0	164	82	0	5.0	5.0	2.5
13	0	30	1.0	0	2.0	5.0	177	50	0	4.0	5.0	2.5
14	0	17	1.0	0	10	5.0	148	64	0	4.0	5.0	2.5
15	0	4.0	1.0	0	26	5.0	207	73	0	3.0	3.0	2.5
16	11	1.0	1.0	1.0	10	5.0	176	66	0	3.0	3.0	2.0
17	32	3.0	8.0	2.0	8.0	5.0	186	54	0	3.0	3.0	2.0
18	19	2.0	500	2.0	6.0	5.0	199	53	0	5.0	5.0	2.0
19	8.0	2.0	250	1.0	8.0	58	578	56	0	5.0	5.0	2.0
20	4.0	2.0	100	1.0	30	107	500	47	0	5.0	5.0	2.0
21	3.0	28	30	.50	347	104	350	56	0	4.0	3.0	1.5
22	2.0	67	10	.50	231	93	230	61	0	4.0	3.0	1.5
23	2.0	30	5.0	.50	133	69	109	62	0	4.0	3.0	1.5
24	2.0	10	3.0	.50	65	68	51	61	0	5.0	4.0	1.5
25	2.0	8.0	2.0	0	72	77	53	60	0	5.0	4.0	2.0
26	1.0	5.0	2.0	0	77	60	58	61	0	5.0	4.0	2.0
27	1.0	3.0	1.0	0	67	1000	63	60	3.0	3.0	3.0	2.0
28	1.0	2.0	1.0	0	59	1200	39	56	3.0	3.0	3.0	2.0
29	1.0	2.0	1.0	0	---	470	72	58	4.0	3.0	4.0	2.0
30	1.0	2.0	.50	6.0	---	392	72	44	3.0	4.0	4.0	2.0
31	1.0	---	.50	91	---	417	---	40	---	4.0	3.0	---
TOTAL	91.0	337.80	946.00	360.50	1377.0	4500.0	4919	2166	133.0	125.0	122.0	70.5
MEAN	2.94	11.3	30.5	11.6	49.2	145	164	69.9	4.43	4.03	3.94	2.35
MAX	32	69	500	189	347	1200	578	131	30	5.0	5.0	3.0
MIN	0	.60	.50	0	2.0	5.0	39	40	0	3.0	3.0	1.5
AC-FT	180	670	1880	715	2730	8930	9760	4300	264	248	242	140

CAL YR 1978 TOTAL 51145.00 MEAN 140 MAX 5780 MIN 0 AC-FT 101400
WTR YR 1979 TOTAL 15149.80 MEAN 41.5 MAX 1200 MIN 0 AC-FT 30050

11056200 SANTA ANA RIVER AT WATERMAN AVENUE, AT SAN BERNARDINO, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1975 to current year.
WATER TEMPERATURES: February 1975 to September 1977.
SEDIMENT RECORDS: February 1975 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1976 to September 1977.
SEDIMENT RECORDS: October 1976 to September 1977.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 10,800 mg/L October 22, 1976; minimum daily mean, no flow for many days each year.
SEDIMENT DISCHARGE: Maximum daily mean, 16,900 tons (15,300 metric tons) October 22, 1976; minimum daily mean, 0 tons on many days each year.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	---	---	---	10.5	---	13.0	---	---		
2		---	---	---	---	---	---	16.0	---	---		
3		18.0	---	---	---	---	---	18.0	---	20.0		
4		---	---	---	---	---	21.0	29.5	30.5	---		
5		---	---	8.0	---	15.0	---	20.0	26.0	---		
6		---	---	14.0	---	11.0	---	18.0	27.0	---		
7		---	---	---	---	10.5	---	24.0	---	---		
8		---	---	---	---	15.0	---	12.5	---	---		
9		---	---	---	---	12.5	---	18.0	---	---		
10		---	---	---	---	15.5	---	---	---	---		
11		---	---	---	---	17.5	18.0	10.0	---	---		
12		---	---	---	---	11.0	---	---	---	---		
13		18.0	---	---	---	15.0	24.0	22.0	---	---		
14		---	---	---	---	11.5	13.0	27.0	---	---		
15		---	---	---	---	12.5	---	---	---	---		
16		---	---	10.0	---	10.5	21.0	24.5	---	---		
17		---	---	---	---	10.0	20.0	23.5	18.0	---		
18		---	19.0	---	---	---	---	30.0	---	---		
19		---	10.0	---	---	---	25.0	25.0	---	---		
20		---	---	---	---	---	24.0	22.0	---	---		
21		---	---	---	---	9.5	---	22.5	---	---		
22		---	---	---	11.5	---	22.0	---	---	---		
23		---	---	---	---	---	18.0	24.0	---	---		
24		---	---	---	---	---	---	23.0	---	---		
25		---	---	---	---	---	21.0	25.0	---	---		
26		---	---	---	---	---	---	---	---	---		
27		---	---	---	---	13.5	16.0	19.0	---	---		
28		---	---	---	---	10.5	10.0	---	---	---		
29		---	---	---	---	---	---	29.0	---	---		
30		---	---	---	---	12.5	10.0	27.0	---	---		
31		---	---	4.0	---	---	---	28.0	---	---		
MONTH		---	---	---	---	---	---	22.0	---	---		

11058200 SANTA ANA RIVER AT WATERMAN AVENUE, AT SAN BERNARDINO, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPER-ATURE, WATER (DEG C)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM
DEC								
04...	1600	--	2.1	47	.27	--	--	--
18...	1530	9.0	E75	2970	--	20	28	38
JAN								
05...	1120	8.0	84	1290	223	--	--	--
06...	1500	14.0	66	1360	242	15	22	28
16...	1420	10.0	.50	56	.08	--	--	--
31...	1000	4.0	340	9820	9020	--	--	--
31...	1115	4.0	267	7090	5110	--	--	--
31...	1450	6.5	E125	2140	--	--	--	--
FEB								
21...	1530	13.5	1280	5460	18900	--	--	--
22...	1130	11.5	E29	1380	--	--	--	--
MAR								
01...	1605	10.5	E22	1670	--	--	--	--
07...	0720	10.0	--	1830	--	52	69	75
13...	0720	15.0	--	4750	--	31	51	79
17...	0840	10.0	--	3360	--	28	32	46
21...	1540	9.5	E100	3620	--	18	24	34
28...	1715	10.5	--	8750	--	14	15	18
29...	1500	--	614	2670	4430	--	--	--
30...	1145	12.5	38	1780	183	--	--	--
APR								
03...	1700	--	164	638	283	--	--	--
04...	0900	16.0	67	596	108	--	--	--
17...	1620	20.0	E180	432	--	--	--	--
19...	1630	25.0	614	2930	4860	--	--	--
27...	1700	18.0	E63	447	--	--	--	--
28...	0600	10.0	E40	313	--	--	--	--
30...	1515	18.0	63	542	92	--	--	--
JUL								
03...	0900	20.0	5.0	124	1.7	--	--	--
AUG								
03...	0930	--	5.1	64	.88	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
DEC							
04...	--	--	--	--	--	--	--
18...	48	59	71	88	99	100	--
JAN							
05...	--	--	--	--	--	--	--
06...	35	41	48	66	92	100	--
16...	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--
FEB							
21...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
MAR							
01...	--	--	--	--	--	--	--
07...	84	97	97	98	100	--	--
13...	94	98	99	100	--	--	--
17...	64	73	82	93	99	100	--
21...	48	66	77	90	99	100	--
28...	20	28	42	61	85	97	100
29...	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--
APR							
03...	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--
JUL							
03...	--	--	--	--	--	--	--
AUG							
03...	--	--	--	--	--	--	--

E Estimated

11056200 SANTA ANA RIVER AT WATERMAN AVENUE, AT SAN BERNARDINO, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	NUMBER OF SAM-PLING POINTS	STREAM-FLOW, INSTAN-TANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
OCT 06...	1300	5	.00	1	1	15	54
SEP 28...	1355	5	.00	1	3	17	51

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
OCT 06...	87	98	100	--	--	--
SEP 28...	81	91	94	96	98	100

11056500 LITTLE SAN GORGONIO CREEK NEAR BEAUMONT, CA

LOCATION.--Lat 34°01'45", long 116°56'43", in NW¼SW¼NW¼ sec.1, T.2 S., R.1 W., San Bernardino County, Hydrologic Unit 18070203, on right bank at upstream side of bridge on Oak Glen Road, 3.0 mi (4.8 km) upstream from Wallace Creek, and 7 mi (11 km) north of Beaumont.

DRAINAGE AREA.-1.74 mi² (4.51 km²).

PERIOD OF RECORD.--October 1948 to current year.

REVISED RECORDS.--WDR-CA-79-1: 1969(M).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,320 ft (1,317 m), from topographic map. Prior to July 30, 1970, at site 42 ft (13 m) downstream on left bank at same datum.

REMARKS.--Records poor. No regulation above station. Several small diversions above station for irrigation. See schematic diagram of Santa Ana River basin. No gage-height record Dec. 6 to Apr. 24.

AVERAGE DISCHARGE.--31 years, 0.53 ft³/s (0.015 m³/s), 384 acre-ft/yr (473,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,900 ft³/s (167 m³/s) Feb. 25, 1969, gage height, 8.50 ft (2.591 m), from floodmarks, from rating curve extended above 32 ft³/s (0.91 m³/s) on basis of slope-area measurements at gage heights 2.18 ft (0.664 m), 3.45 ft (1.052 m), and 8.50 ft (2.591 m); no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 33 ft³/s (0.93 m³/s) Mar. 28 (time unknown), gage height unknown, no other peak above base of 20 ft³/s (0.57 m³/s); minimum daily, 0.30 ft³/s (0.008 m³/s) Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.59	.70	1.3	1.0	8.8	3.0	4.6	1.1	.50	.59	.50	.47
2	.59	.70	1.1	.96	8.0	3.5	4.0	1.6	.50	.59	.59	.46
3	.70	.70	.95	.96	6.0	2.7	3.5	1.3	.59	.59	.59	.46
4	.70	.70	.95	1.0	4.7	2.2	3.2	1.1	.59	.59	.59	.44
5	.70	.59	.95	9.6	4.2	2.0	2.9	.95	.59	.59	.59	.48
6	.70	.70	.90	6.0	3.7	1.8	2.7	.95	.59	.59	.70	.43
7	.95	.70	.70	4.0	3.3	1.7	2.3	.82	.59	.50	.50	.42
8	1.1	.70	.66	2.5	3.0	1.6	2.2	1.1	.59	.50	.50	.34
9	1.1	.59	.64	2.0	2.7	1.5	2.0	1.3	.59	.41	.50	.33
10	1.1	2.0	.74	1.8	2.5	1.4	1.9	1.1	.59	.41	.41	.35
11	1.1	4.1	.90	1.6	2.3	1.5	1.8	.95	.59	.50	.50	.35
12	1.3	3.8	.80	1.5	2.1	1.6	1.7	.95	.59	.41	.50	.35
13	1.3	3.4	.70	1.4	1.8	1.7	1.6	.82	.59	.41	.59	.32
14	1.1	2.0	.70	1.3	2.0	1.8	1.5	.70	.59	.41	.59	.33
15	.70	1.4	.70	1.3	2.2	1.9	1.4	.70	.59	.41	.50	.30
16	.70	1.4	.72	1.2	1.9	2.0	1.4	.82	.59	.41	.50	.34
17	.95	1.4	1.5	1.1	1.8	2.1	1.3	.70	.59	.41	.50	.35
18	.70	1.3	2.1	.96	1.9	2.4	1.3	.70	.59	.50	.50	.36
19	.70	1.1	1.7	.96	2.0	2.6	1.2	.70	.59	.50	.50	.36
20	.95	1.1	1.5	.92	2.3	2.3	1.2	.70	.59	.82	.50	.37
21	.82	1.4	1.4	.90	2.5	2.2	1.2	.70	.50	.59	.50	.38
22	.82	1.6	1.3	.90	6.5	2.1	1.1	.70	.50	.59	.54	.35
23	1.4	1.3	1.2	.88	5.2	2.0	1.1	.70	.50	.59	.54	.34
24	1.1	1.3	1.1	.88	4.0	2.0	1.1	.70	.50	.50	.56	.36
25	.82	1.3	1.1	.88	3.6	2.3	1.1	.70	.50	.50	.56	.35
26	.82	1.3	1.1	.88	3.0	2.3	1.1	.70	.50	.50	.52	.36
27	.82	1.1	1.1	.96	2.4	2.5	1.1	.70	.41	.50	.51	.38
28	.70	1.1	1.1	.90	2.2	21	1.1	.70	.41	.50	.50	.38
29	.70	.95	1.1	.90	---	9.0	1.1	.70	.59	.50	.50	.35
30	.70	.95	1.0	1.1	---	7.0	1.1	.59	.59	.50	.52	.37
31	.70	---	1.0	11	---	5.5	---	.59	---	.50	.47	---
TOTAL	27.13	41.38	32.71	62.24	96.6	99.2	54.8	26.54	16.62	15.91	16.37	11.23
MEAN	.88	1.38	1.06	2.01	3.45	3.20	1.83	.86	.55	.51	.53	.37
MAX	1.4	4.1	2.1	11	8.8	21	4.6	1.6	.59	.82	.70	.48
MIN	.59	.59	.64	.88	1.8	1.4	1.1	.59	.41	.41	.41	.30
AC-FT	54	82	65	123	192	197	109	53	33	32	32	22

CAL YR 1978 TOTAL 1107.36 MEAN 3.03 MAX 47 MIN 0 AC-FT 2200
WTR YR 1979 TOTAL 500.73 MEAN 1.37 MAX 21 MIN .30 AC-FT 993

11057000 SAN TIMOTEO CREEK NEAR REDLANDS, CA

LOCATION.--Lat 34°01'58", long 117°12'28", in NE¼NE¼NE¼ sec.5, T.2 S., R.3 W., San Bernardino County, Hydrologic Unit 18070203, on upstream side of left end of bridge on San Timoteo Canyon Road, 2.0 mi (3.2 km) southwest of Redlands, and 3.4 mi (5.5 km) downstream from Yucaipa Creek.

DRAINAGE AREA.--118 mi² (306 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1926 to September 1968, October 1973 to March 1979 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 1,280 ft (390 m), from topographic map. Prior to Oct. 30, 1934, at site 2 mi (3 km) upstream at different datum.

REMARKS.--Records poor. No regulation above station. Pumping above station for irrigation. See schematic diagram of Santa Ana River basin. No stage-discharge relationship October 1 to March 3 due to channel construction.

AVERAGE DISCHARGE.--47 years (water years 1927-68, 1974-78), 1.40 ft³/s (0.040 m³/s), 1,010 acre-ft/yr (1.26 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,460 ft³/s (211 m³/s) Mar. 2, 1938, result of slope-area measurement of maximum flow; no flow for many months in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.25 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 6	0230	(a)		*6.50	1.981
Mar. 29	1500	*648	18.4	5.52	1.682

a Channel construction.

Minimum daily discharge, no flow many months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	0	85	0	0					
2			0	0	25	.87	0					
3			0	0	50	0	0					
4			0	0	25	0	0					
5			0	1.0	0	0	0					
6			0	75	0	0	0					
7			0	0	0	0	0					
8			0	0	0	0	---					
9			0	0	0	0	---					
10			0	0	0	0	---					
11			0	0	0	0	---					
12			0	0	0	0	---					
13			0	0	0	0	---					
14			0	0	0	0	---					
15			0	0	0	0	---					
16			0	0	0	0	---					
17			0	0	0	0	---					
18			8.2	0	0	0	---					
19			0	0	0	0	---					
20			0	0	30	.27	---					
21			0	0	50	0	---					
22			0	0	0	0	---					
23			0	0	0	0	---					
24			0	0	0	0	---					
25			0	0	0	0	---					
26			0	0	0	0	---					
27			0	0	0	0	---					
28			0	0	0	.64	---					
29			0	0	---	102	---					
30			0	0	---	2.7	---					
31		---	0	75	---	0	---					
TOTAL	0	0	8.2	151.0	265	106.48	---					
MEAN	0	0	.26	4.87	9.46	3.43	---					
MAX	0	0	8.2	75	85	102	---					
MIN	0	0	0	0	0	0	---					
AC-FT	0	0	16	300	526	211	---					

CAL YR 1978 TOTAL 2065.96 MEAN 5.66 MAX 202 MIN 0 AC-FT 4100

11057000 SAN TIMOTEO CREEK NEAR REDLANDS, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
WATER TEMPERATURES: October 1976 to March 1979 (discontinued).
SEDIMENT RECORDS: October 1976 to March 1979 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1976 to September 1978.
SEDIMENT RECORDS: October 1976 to September 1978.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 116,000 mg/L Feb. 15, 1978; minimum daily mean, no flow for most of year.
SEDIMENT DISCHARGE: Maximum daily, 63,400 tons (57,500 metric tons) Mar. 4, 1978; minimum daily, 0 tons for most of the year.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
DEC							
10...	1430	9.0	--	117000	--	28	38
10...	1600	9.0	20	102000	5510	--	--
JAN							
31...	0845	3.0	--	77000	--	24	35
31...	0930	3.0	--	76800	--	--	--
FEB							
21...	1640	9.0	--	21400	--	--	--
22...	0940	11.0	--	17700	--	--	--
MAR							
10...	1300	13.0	.10	2230	.60	--	--
10...	1500	13.5	.15	2680	1.1	--	--
27...	1620	14.0	.40	91200	98	--	--
28...	1545	13.5	--	59700	--	--	--
28...	1630	13.5	--	50900	--	25	35
29...	0840	12.0	.20	33300	18	26	36
29...	0920	12.0	2.5	28100	190	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
DEC							
10...	51	65	76	89	97	100	--
10...	--	--	--	--	--	--	--
JAN							
31...	48	62	74	85	95	99	100
31...	--	--	--	--	--	--	--
FEB							
21...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
MAR							
10...	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
28...	46	61	72	81	97	99	100
28...	46	60	72	84	96	99	100
29...	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	NUMBER OF SAMPLING POINTS	STREAMFLOW, INSTANTANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
OCT							
10...	1200	1	.00	2	5	6	13
10...	1205	1	.00	36	63	77	84

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
OCT						
10...	22	34	49	71	86	100
10...	89	94	97	99	100	--

11057500 SAN TIMOTEO CREEK NEAR LOMA LINDA, CA

LOCATION.--Lat 34°03'46", long 117°16'16", in SE¼NE¼NW¼ sec. 26, T.1 S., R.4 W., San Bernardino County, Hydrologic Unit 18070203, on left bank 200 ft (61.0 m) upstream of Redlands Boulevard bridge, and 0.6 mi (0.97 km) northwest of Loma Linda.

DRAINAGE AREA.--125 mi² (324 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1954 to September 1965, February 1968 to October 1975, April 1, 1979 to present.

GAGE.--Water-stage recorder. Altitude of gage is 1,030 ft (314 m), from topographic map.

REMARKS.--Records good. No regulation above station. Natural flow affected by pumping and return flow from irrigated areas.

AVERAGE DISCHARGE.--18 years (1954-65, 1968-75), 2.50 ft³/s (0.071 m³/s), 1,810 acre-ft/yr (2.23 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s (425 m³/s) Feb. 25, 1969, gage height, 8.2 ft (2.50 m), from floodmark, from rating curve extended above 2,100 ft³/s (59.5 m³/s) on basis of slope-conveyance measurement of maximum flow; no flow for several days in some years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	.07	.11	.01	.07
2								2.9	.16	.37	0	.03
3								0	.71	.24	0	.08
4								0	.06	.10	0	.46
5								0	.04	.15	.05	.06
6								0	.01	.09	.09	.13
7								0	0	.07	0	0
8								.58	0	.08	.01	0
9								4.6	0	.20	.04	0
10								.02	0	.07	0	0
11								.26	0	.17	.16	0
12								0	0	.27	.04	0
13								0	.06	.05	.07	0
14								.04	.21	.24	.20	.13
15								.15	.21	.15	.45	.49
16								.11	0	.17	.01	.64
17								0	.05	.01	.01	1.6
18								.02	.27	0	0	1.1
19								.06	.11	.02	0	.17
20								0	0	3.9	0	.04
21								0	0	.23	0	1.0
22								0	.06	0	0	.12
23								0	0	0	0	0
24								0	.21	0	.09	.17
25								0	0	0	0	0
26								0	.01	0	0	0
27								0	0	0	0	0
28								0	0	0	0	0
29								.07	.53	0	0	0
30								.53	.31	0	0	0
31							---	.05	---	0	0	---
TOTAL							0	9.39	3.06	6.69	2.05	7.09
MEAN							0	.30	.10	.22	.066	.24
MAX							0	4.6	.71	3.9	.09	1.6
MIN							0	0	0	0	0	0
AC-FT							0	19	6.1	13	4.1	14

11057500 SAN TIMOTEO CREEK NEAR LOMA LINDA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
WATER TEMPERATURES: April 1979 to September 1979.
SEDIMENT RECORDS: April 1979 to September 1979.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPER-ATURE, WATER (DEG C)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM
MAY								
02...	0730	12.0	17	4630	213	51	68	80
02...	0900	14.0	2.3	2660	17	81	91	96
02...	1000	14.0	1.3	1670	5.9	86	93	94
02...	1115	14.0	.35	611	.58	--	--	--
02...	1515	--	.61	101	.17	--	--	--
30...	0845	15.5	.03	16	.00	--	--	--
JUN								
04...	1050	21.5	.10	9	.00	--	--	--
04...	1300	32.0	.06	9	.00	--	--	--
JUL								
10...	0900	--	.35	14	.01	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
MAY							
02...	86	88	93	96	98	99	100
02...	96	96	98	100	--	--	--
02...	95	96	97	100	--	--	--
02...	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--
JUN							
04...	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--
JUL							
10...	--	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	NUMBER OF SAM-PLING POINTS	STREAM-FLOW, INSTAN-TANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
SEP							
28...	1320	1	.00	--	1	4	14
28...	1325	1	.00	1	3	11	25
28...	1330	1	.00	--	1	4	8

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP						
28...	35	59	75	86	94	100
28...	40	58	71	84	95	100
28...	21	43	67	86	99	100

11058500 EAST TWIN CREEK NEAR ARROWHEAD SPRINGS, CA

LOCATION.--Lat 34°10'45", long 117°15'53", in NW¼NE¼NE¼ sec.14, T.1 N., R.4 W., San Bernardino County, Hydrologic Unit 18070203, on right bank 100 ft (30 m) upstream from Del Rosa Water Co.'s diversion, 0.5 mi (0.8 km) south of Arrowhead Springs, and 1.0 mi (1.6 km) downstream from Strawberry Creek.

DRAINAGE AREA.--8.80 mi^2 (22.79 km^2).

PERIOD OF RECORD.--December 1919 to current year. Prior to October 1952, published as Strawberry Creek near Arrowhead Springs.

GAGE.--Water-stage recorder. Broad-crested weir since September 1938. Altitude of gage is 1,590 ft (485 m), from topographic map.

REMARKS.--Records fair, except those for periods of doubtful gage-height record (Oct. 1 to Dec. 17, Dec. 26 to Jan. 4, Feb. 6-21) which are poor. No regulation above station. One small diversion for domestic use above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--59 years (water years 1921-79), 4.47 ft^3/s (0.127 m^3/s), 3,240 acre-ft/yr (3.99 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,360 ft^3/s (95.2 m^3/s) Mar. 2, 1938, based on rainfall-runoff studies; no flow at times in 1929, 1931-35.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 100 ft^3/s (2.83 m^3/s) Mar. 28 (1130 hrs), gage height, 3.84 ft (1.170 m), no other recorded peaks above base of 40 ft^3/s (1.133 m^3/s). There may have been other peaks above base on Nov. 11 and Dec. 17 during period of no record. Minimum daily discharge, 1.3 ft^3/s (0.037 m^3/s) Sept. 12, 13, 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	2.6	3.4	3.3	13	12	21	6.5	5.8	4.0	2.0	1.9
2	2.5	2.6	3.3	3.2	9.7	13	19	8.1	6.0	4.0	2.0	1.9
3	2.5	2.6	3.2	3.1	7.1	11	17	6.3	6.0	4.3	2.0	1.8
4	2.5	2.6	3.0	3.0	5.1	7.2	16	6.1	5.7	4.6	2.0	1.7
5	2.5	2.6	2.9	6.8	3.7	5.3	14	5.8	6.2	4.3	2.0	1.6
6	2.5	2.6	2.9	12	3.7	3.9	13	6.1	6.2	4.3	2.1	1.6
7	2.5	2.6	2.8	7.5	3.4	5.4	12	6.3	6.7	3.9	2.0	1.5
8	2.5	2.6	2.8	7.0	3.2	7.1	11	8.0	5.8	4.0	1.9	1.5
9	2.5	2.6	2.8	7.3	3.1	7.1	10	6.3	5.8	3.3	1.9	1.4
10	2.5	7.0	2.8	6.1	3.0	6.8	9.1	5.9	5.8	3.1	1.8	1.4
11	2.5	17	2.8	5.8	3.0	6.2	8.4	5.7	5.4	3.2	2.0	1.4
12	2.5	13	2.8	5.4	3.0	6.1	9.5	5.4	5.4	3.1	2.4	1.3
13	2.5	9.0	2.8	5.4	3.0	5.5	8.9	5.6	5.4	3.1	2.6	1.3
14	2.5	7.0	2.8	5.5	3.6	5.5	8.5	5.4	5.0	3.1	2.4	1.4
15	2.6	5.0	2.8	7.4	3.3	5.5	8.2	5.2	5.8	3.1	2.2	1.4
16	2.6	6.0	2.8	7.7	3.2	6.9	8.1	5.6	6.2	3.0	2.1	1.4
17	2.7	7.6	26	7.0	2.9	8.2	8.2	5.6	7.1	3.0	2.0	1.5
18	2.9	6.0	26	8.7	2.8	8.9	7.9	5.4	6.7	3.0	2.0	1.6
19	4.5	5.3	15	6.8	2.8	14	7.6	5.9	6.2	3.0	2.2	1.5
20	4.3	5.0	8.6	6.0	2.9	12	7.7	6.4	6.7	3.0	2.3	1.5
21	3.6	5.0	6.6	5.8	3.0	11	7.4	6.5	6.2	3.0	2.2	1.5
22	3.1	5.0	6.2	5.3	4.8	9.8	7.3	5.9	6.2	2.8	2.0	1.5
23	2.9	5.1	5.8	5.1	5.5	8.8	7.2	5.5	5.8	2.4	1.8	1.5
24	2.7	5.4	5.1	5.0	6.0	7.8	6.9	5.9	5.8	2.3	1.7	1.4
25	2.7	5.8	4.8	7.1	5.6	7.5	6.3	5.8	6.2	2.3	1.7	1.4
26	2.7	6.8	4.4	6.0	10	7.1	6.0	5.8	5.8	2.2	1.8	1.3
27	2.6	10	4.2	5.0	11	43	6.1	5.8	4.6	2.2	1.7	1.3
28	2.6	6.0	3.9	4.8	11	70	6.0	6.0	4.3	2.1	1.9	1.4
29	2.6	4.3	3.7	4.8	---	68	6.0	6.1	3.6	2.1	2.1	1.4
30	2.6	3.7	3.6	5.6	---	41	6.4	6.5	3.6	2.1	2.0	1.6
31	2.6	---	3.4	9.9	---	28	---	6.0	---	2.0	2.0	---
TOTAL	85.3	168.4	174.0	189.4	142.4	459.6	290.7	187.4	172.0	95.9	62.8	44.9
MEAN	2.75	5.61	5.61	6.11	5.09	14.8	9.69	6.05	5.73	3.09	2.03	1.50
MAX	4.5	17	26	12	13	70	21	8.1	7.1	4.6	2.6	1.9
MIN	2.5	2.6	2.8	3.0	2.8	3.9	6.0	5.2	3.6	2.0	1.7	1.3
AC-FT	169	334	345	376	282	912	577	372	341	190	125	89

CAL YR 1978 TOTAL 4753.8 MEAN 13.0 MAX 314 MIN 1.7 AC-FT 9430
WTR YR 1979 TOTAL 2072.8 MEAN 5.68 MAX 70 MIN 1.3 AC-FT 4110

11058600 WATERMAN CANYON CREEK NEAR ARROWHEAD SPRINGS, CA

LOCATION.--Lat 34°11'36", long 117°16'25", in NE¼NW¼NW¼ sec.11, T.1 N., R.4 W., San Bernardino County, Hydrologic Unit 18070203, on left bank 0.8 mi (1.3 km) northwest of Arrowhead Springs, and 1.3 mi (2.1 km) north of San Bernardino National Forest boundary.

DRAINAGE AREA.--4.65 mi² (12.04 km²).

PERIOD OF RECORD.--November 1911 to October 1914 (published as "near San Bernardino"), December 1919 to current year.

GAGE.--Water-stage recorder. Broad-crested weir since September 1938. Datum of gage is 2,045.46 ft (623.456 m) National Geodetic Vertical Datum of 1929. Prior to December 1919, nonrecording gage at site 300 ft (91 m) downstream at different datum.

REMARKS.--Records fair. No regulation above station. One small diversion for domestic use above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--61 years, (water years 1913-14, 1921-78), 2.59 ft³/s (0.073 m³/s), 1,880 acre-ft/yr (2.32 hm³/yr).

EXTREMES FOR PERIOD OF RECORD (SINCE 1920).--Maximum discharge, 2,350 ft³/s (66.6 m³/s) Mar. 2, 1938, based on rainfall-runoff studies; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 35 ft³/s (0.99 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 17	1745	46	1.30	2.69	0.820	Mar. 27	2000	*201	5.69	3.32	1.012
Feb. 21	0400	68	1.93	2.80	0.853						

Minimum daily discharge, 0.76 ft³/s (0.022 m³/s) Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	1.4	1.8	2.3	7.4	8.7	13	4.8	3.6	2.6	.98	1.2
2	.90	1.4	1.8	2.2	6.1	6.6	14	5.7	3.6	2.7	.92	1.1
3	.88	1.3	1.8	2.2	5.4	6.3	14	4.5	3.5	2.8	.90	1.1
4	.88	1.3	1.8	2.1	4.9	6.2	14	4.2	3.5	2.8	.85	1.1
5	.87	1.3	1.8	5.2	4.6	6.0	14	4.0	3.4	2.8	.88	1.0
6	.87	1.3	1.8	5.2	4.6	5.8	14	4.2	3.5	2.7	1.0	1.0
7	1.1	1.3	1.8	3.6	4.8	5.9	14	4.1	3.8	2.5	1.0	.95
8	1.1	1.3	1.7	3.4	4.9	6.0	13	4.3	3.4	2.4	1.1	1.0
9	1.0	1.3	1.7	3.5	5.1	5.9	13	3.8	3.2	2.2	1.0	.84
10	.97	2.3	1.6	3.2	5.1	5.6	13	3.5	3.1	2.1	.97	.85
11	.93	3.8	1.6	3.1	5.0	5.5	13	3.2	3.1	2.1	1.3	.86
12	.91	3.0	1.6	3.0	4.8	5.4	13	3.1	2.9	2.0	1.4	.86
13	.88	2.5	1.6	2.8	4.6	5.7	12	3.1	2.8	1.8	1.4	.83
14	.93	2.2	1.6	3.1	5.7	5.8	11	3.1	2.7	1.8	1.4	.80
15	.96	2.0	1.7	4.8	4.8	5.8	10	3.2	2.8	1.9	1.3	.76
16	1.0	1.9	1.6	4.7	4.5	5.8	9.3	3.4	2.9	1.7	1.3	.79
17	1.0	1.7	9.5	4.1	4.3	6.4	9.0	3.4	3.2	1.7	1.2	.83
18	1.0	1.7	8.4	4.2	4.2	5.7	8.4	3.4	3.5	1.7	1.2	.80
19	1.0	1.6	6.4	3.6	4.2	8.3	7.9	3.3	3.2	1.6	1.3	.85
20	1.4	1.6	4.5	3.4	4.6	6.3	7.4	3.7	3.0	1.8	1.3	.89
21	1.5	1.6	3.9	3.3	13	5.9	7.1	3.7	3.0	1.7	1.2	.93
22	1.4	1.6	3.7	3.2	8.7	5.7	6.8	3.6	2.9	1.7	1.1	.94
23	1.1	1.7	3.5	3.0	9.5	5.2	6.4	3.4	2.9	1.6	1.0	.93
24	1.1	1.7	3.2	2.9	7.7	5.1	6.3	3.4	2.9	1.6	1.1	1.1
25	1.3	4.0	3.0	3.7	7.1	4.9	6.1	3.4	2.8	1.5	1.1	1.1
26	1.2	3.7	2.7	3.0	6.6	4.8	5.8	3.4	2.7	1.5	1.1	1.0
27	1.1	3.0	2.5	2.8	6.2	29	5.5	3.5	2.6	1.4	1.0	1.0
28	1.1	1.9	2.5	2.8	6.8	20	5.2	3.8	2.6	1.4	1.2	1.2
29	1.2	1.8	2.4	2.6	---	17	4.9	3.8	2.5	1.3	1.3	1.2
30	1.4	1.8	2.3	2.7	---	16	4.9	3.9	2.5	1.4	1.2	1.2
31	1.4	---	2.3	4.9	---	14	---	3.7	---	1.4	1.2	---
TOTAL	33.28	59.0	88.1	104.6	164.4	251.3	296.0	115.6	92.1	60.2	35.20	29.01
MEAN	1.07	1.97	2.84	3.37	5.87	8.11	9.87	3.73	3.07	1.94	1.14	.97
MAX	1.5	4.0	9.5	5.2	13	29	14	5.7	3.8	2.8	1.4	1.2
MIN	.87	1.3	1.6	2.1	4.2	4.8	4.9	3.1	2.5	1.3	.85	.76
AC-FT	66	117	175	207	326	498	587	229	183	119	70	58

CAL YR 1978 TOTAL 2763.40 MEAN 7.57 MAX 211 MIN .87 AC-FT 5480
WTR YR 1979 TOTAL 1328.79 MEAN 3.64 MAX 29 MIN .76 AC-FT 2640

11059000 WARM CREEK FLOODWAY AT SAN BERNARDINO, CA

LOCATION.--Lat 34°05'45", long 117°16'30", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, on left bank 0.4 mi (0.6 km) upstream from Mill Street, and 1.8 mi (2.9 km) upstream from mouth.

DRAINAGE AREA.--47.8 mi² (123.8 km²).

PERIOD OF RECORD.--January 1961 to current year. Prior to October 1965, published as "near San Bernardino."

GAGE.--Water-stage recorder. Altitude of gage is 1,000 ft (305 m), from topographic map. Prior to Dec. 21, 1967, at site 0.4 mi (0.6 km) downstream at different datum.

REMARKS.--Records poor. Flow partly regulated by percolation basins above Marshall Boulevard. Del Rosa Water Company diverts from East Twin Creek for domestic use and irrigation. See schematic diagram of Santa Ana River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,600 ft³/s (272 m³/s) Feb. 25, 1969, gage height, 6.75 ft (2.057 m), from rating curve extended above 3,000 ft³/s (85.0 m³/s); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,240 ft³/s (35.1 m³/s) Mar. 27, gage height, 4.31 ft (1.314 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	5.8	0	49	49	206	1.0	0			
2	0	0	9.6	0	37	11	80	11	.14			
3	0	0	0	0	0	0	56	1.8	0			
4	0	0	4.7	0	0	0	48	.51	0			
5	0	0	5.4	101	0	0	29	.14	0			
6	0	0	0	80	0	0	34	.24	0			
7	0	0	0	0	0	0	25	.39	0			
8	0	0	0	0	0	0	27	12	0			
9	0	0	0	0	0	0	27	.91	0			
10	0	14	0	0	0	0	27	.06	0			
11	0	148	0	0	0	0	26	.01	0			
12	0	17	0	0	0	2.6	26	0	0			
13	0	27	0	0	0	10	23	0	0			
14	0	6.6	0	0	0	17	16	0	0			
15	0	0	0	31	0	20	13	0	0			
16	0	0	0	11	0	24	13	0	0			
17	0	0	87	9.4	0	68	8.5	0	0			
18	0	0	122	17	0	71	12	0	0			
19	0	0	81	0	0	179	10	0	0			
20	1.8	0	5.5	0	1.8	46	7.1	0	0			
21	0	17	0	0	150	35	6.2	0	0			
22	0	0	0	0	48	43	5.3	0	0			
23	0	0	0	0	58	41	5.2	0	0			
24	0	4.2	0	0	16	40	4.7	0	0			
25	0	0	0	0	10	46	4.2	0	0			
26	0	0	0	0	7.5	36	3.6	0	0			
27	0	0	0	0	0	258	2.3	0	0			
28	0	0	0	1.7	0	165	1.7	0	0			
29	0	0	0	0	---	78	1.1	0	0			
30	0	0	0	0	---	68	1.2	0	0			
31	0	---	0	21	---	98	---	0	---			---
TOTAL	1.8	233.8	321.0	272.1	377.3	1405.6	749.1	28.06	.14	0	0	0
MEAN	.058	7.79	10.4	8.78	13.5	45.3	25.0	.91	.005	0	0	0
MAX	1.8	148	122	101	150	258	206	12	.14	0	0	0
MIN	0	0	0	0	0	0	1.1	0	0	0	0	0
AC-FT	3.6	464	637	540	748	2790	1490	56	.3	0	0	0

CAL YR 1978 TOTAL 9487.37 MEAN 26.0 MAX 883 MIN 0 AC-FT 18820
WTR YR 1979 TOTAL 3388.90 MEAN 9.28 MAX 258 MIN 0 AC-FT 6720

11059100 SAN BERNARDINO WATER QUALITY CONTROL PLANT AT SAN BERNARDINO, CA

LOCATION.--Lat 34°04'16", long 117°17'16", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, at effluent end of chlorine contact chamber, 0.5 mi (0.8 km) upstream from Santa Ana River at E Street bridge, in San Bernardino.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 979.50 ft (298.552 m) National Geodetic Vertical Datum of 1929 (levels by city of San Bernardino).

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 43 ft³/s (1.22 m³/s) Jan. 24, 1978; minimum daily, 12 ft³/s (0.34 m³/s) Oct. 25, Nov. 4, 5, 7-9, 1972.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	24	26	25	28	28	26	25	26	26	27	27
2	25	26	26	27	28	27	27	27	26	27	27	26
3	25	26	26	27	27	26	26	25	26	27	28	27
4	23	26	27	27	26	26	27	23	27	26	27	27
5	23	26	27	30	27	26	26	23	26	26	26	28
6	24	27	27	29	24	27	26	27	27	27	28	28
7	23	26	27	26	26	26	26	26	26	26	28	27
8	23	26	26	27	26	27	24	27	26	25	28	28
9	24	26	26	26	26	26	26	27	26	27	28	28
10	23	26	26	27	26	26	27	26	25	27	28	29
11	23	29	27	27	25	25	26	23	27	27	27	28
12	24	27	26	26	28	27	26	22	26	27	27	28
13	24	27	26	27	26	26	25	26	26	27	28	27
14	23	27	26	26	26	26	26	26	27	27	28	28
15	23	27	26	28	26	26	24	26	27	25	28	28
16	24	27	26	27	26	26	27	26	27	27	28	28
17	23	26	28	27	26	27	26	26	25	27	28	29
18	23	26	28	27	25	26	27	26	27	27	28	28
19	23	26	28	27	26	30	26	25	27	27	27	28
20	24	27	27	27	27	26	26	25	27	28	28	28
21	23	27	27	26	30	26	26	26	26	27	28	28
22	24	27	27	26	26	26	25	22	26	26	28	28
23	24	26	26	27	27	26	26	25	26	28	27	28
24	24	25	26	26	27	27	25	23	25	28	28	27
25	23	26	23	25	25	25	26	26	27	27	27	29
26	24	26	27	27	26	27	26	26	26	26	27	28
27	24	27	27	26	26	31	26	26	26	26	28	27
28	23	26	26	26	26	28	25	26	27	26	27	26
29	23	26	26	27	---	27	24	26	27	26	28	28
30	24	26	26	26	---	26	26	26	27	28	28	28
31	23	---	26	28	---	27	---	26	---	27	27	---
TOTAL	730	790	819	830	738	826	775	785	790	828	855	834
MEAN	23.5	26.3	26.4	26.8	26.4	26.6	25.8	25.3	26.3	26.7	27.6	27.8
MAX	25	29	28	30	30	31	27	27	27	28	28	29
MIN	23	24	23	25	24	25	24	22	25	25	26	26
AC-FT	1450	1570	1620	1650	1460	1640	1540	1560	1570	1640	1700	1650

CAL YR 1978 TOTAL 9397 MEAN 25.7 MAX 43 MIN 22 AC-FT 18640
WTR YR 1979 TOTAL 9600 MEAN 26.3 MAX 31 MIN 22 AC-FT 19040

11059100 SAN BERNARDINO WATER QUALITY CONTROL PLANT AT SAN BERNARDINO, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to current year.
CHEMICAL ANALYSES: Water years 1973 to current year.
SPECIFIC CONDUCTANCE: Water years 1973 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1972 to current year.

INSTRUMENTATION.--Specific conductance recorder since October 1972.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,260 micromhos May 23, 1975; minimum recorded, 658 micromhos Mar. 31, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,160 micromhos Sept. 21; minimum recorded, 710 micromhos Dec. 24.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE, WATER (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT					
03...	0800	15	1000	14.5	573
NOV					
02...	0900	31	1012	25.0	500
DEC					
04...	1315	36	910	23.0	490
JAN					
02...	1230	34	870	20.5	493
25...	1040	43	985	20.0	515
FEB					
05...	1510	29	975	19.5	493
23...	0750	16	1020	20.0	548
MAR					
02...	1048	36	900	20.5	507
23...	1056	42	956	22.0	518
APR					
04...	1130	36	996	23.0	527
18...	1216	38	950	24.0	519
MAY					
01...	1100	36	990	24.0	546
14...	1400	36	900	26.0	488
31...	1345	34	993	26.5	532
JUN					
11...	1005	39	900	26.0	502
JUL					
02...	1452	31	932	28.5	500
17...	1045	31	960	28.5	576
AUG					
03...	1055	41	910	29.0	537
14...	1320	39	900	29.5	502
28...	1410	34	930	29.0	538
SEP					
10...	1034	37	966	24.0	544

11059100 SAN BERNARDINO WATER QUALITY CONTROL PLANT AT SAN BERNARDINO, CA--Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1120	1050	1090	1040	946	996	1050	894	993	932	812	849
2	1110	1010	1060	1030	956	952	1060	906	987	1020	812	882
3	1020	988	977	1050	968	1010	966	870	930	1080	918	1010
4	1080	956	1020	1040	940	982	1040	872	948	1060	810	980
5	1040	916	995	968	898	933	1080	972	1030	1040	856	980
6	1030	912	990	986	904	949	1090	952	1030	998	734	907
7	1030	928	988	1110	920	982	1070	932	1010	972	798	925
8	948	866	911	1110	984	1040	1090	936	1040	1040	826	953
9	980	854	909	1060	952	1010	1050	926	995	1070	942	1020
10	1020	878	956	1080	972	1040	970	848	936	1090	944	1030
11	1050	926	989	1090	924	997	1020	844	944	1080	956	1020
12	1050	918	990	940	816	885	1060	868	976	1080	852	1020
13	1000	872	947	966	876	923	1070	878	969	1000	906	976
14	986	930	962	1030	874	961	1090	910	1020	980	874	937
15	942	860	908	1060	974	1020	1070	942	1010	1000	868	926
16	1040	868	934	1060	922	1000	1050	866	964	1050	878	977
17	1060	936	1010	1090	968	1040	932	852	893	1080	910	1010
18	1020	904	971	1130	938	1010	996	758	901	1050	902	1000
19	1010	896	962	1030	878	949	1000	860	935	1090	930	1020
20	994	884	940	1040	910	984	102[illegible]	888	972	1020	868	981
21	1010	910	973	1100	902	1020	1050	798	944	1000	874	944
22	960	844	917	1090	952	1020	962	798	877	1040	886	961
23	986	888	937	1050	896	986	976	862	938	1060	920	1010
24	1010	910	973	1030	880	932	916	710	847	1090	910	1030
25	1010	914	981	1030	936	989	878	752	823	1090	946	1020
26	1020	912	990	1000	882	957	998	814	889	1080	928	1010
27	1050	950	1010	1050	876	956	1070	888	991	996	846	957
28	1050	950	1000	1060	884	974	1090	794	983	970	818	920
29	976	900	958	1040	866	987	1030	752	890	1040	876	953
30	1000	900	958	1080	902	1010	1050	882	989	1070	952	1020
31	1040	944	1010	---	---	---	968	852	931	1090	982	999
MONTH	1120	844	975	1130	816	983	1090	710	955	1090	734	976

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	968	884	907	1050	924	999	1030	946	981	1120	842	1000
2	1030	882	954	1050	900	974	1060	962	998	1070	954	1010
3	982	858	931	1060	892	936	1120	1020	1070	1040	922	1000
4	966	824	928	972	874	924	1100	960	1060	1090	976	1030
5	1020	866	943	998	890	944	1090	990	1040	1040	918	993
6	982	744	880	1050	922	996	1070	1020	1050	984	842	938
7	838	742	799	1100	950	1040	1060	976	1020	1020	894	945
8	1100	768	921	1100	934	1020	1020	948	981	1050	932	996
9	1100	892	1010	1060	886	1020	1070	928	984	1030	874	967
10	1020	868	979	1040	944	984	1110	1000	1060	1110	916	994
11	982	788	931	988	886	944	1110	954	1050	1100	968	1050
12	1080	882	969	1010	888	949	1050	958	1020	1040	920	1010
13	1100	964	1030	1060	956	1010	1090	958	1030	988	872	945
14	1110	952	1030	1070	960	1020	1100	956	1020	1050	876	948
15	1040	932	994	1090	970	1040	974	892	942	1100	940	1040
16	1080	914	1010	1090	956	1030	1050	850	949	1100	942	1040
17	1080	942	1000	1020	868	967	1070	954	1030	1100	968	1040
18	976	854	940	1010	922	972	1090	950	1040	1120	966	1070
19	1020	854	941	964	846	919	1100	960	1060	1120	982	1050
20	1020	908	973	1060	910	975	1070	944	1020	1000	910	972
21	1030	800	930	1100	924	1010	1070	920	1010	1100	986	988
22	982	864	931	---	---	---	1030	902	958	1120	984	1050
23	1030	834	938	---	---	---	1030	876	960	1110	958	1040
24	990	908	959	1010	956	991	1140	970	1060	1120	966	1040
25	966	888	935	998	904	953	1100	930	1020	1120	946	1040
26	1040	870	945	1080	866	957	1130	960	1040	1060	918	1010
27	1050	930	1010	1090	854	1020	1130	974	1050	1010	890	969
28	1060	924	1010	1010	886	957	1100	950	1020	1010	860	965
29	---	---	---	1030	942	996	964	852	920	1080	902	975
30	---	---	---	1080	970	1040	1060	894	957	1110	920	1040
31	---	---	---	1060	956	1020	---	---	---	1110	986	1060
MONTH	1110	742	955	1100	846	987	1140	850	1010	1120	842	1010

11059100 SAN BERNARDINO WATER QUALITY CONTROL PLANT AT SAN BERNARDINO, CA--Continued

WATER-QUALITY RECORDS

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1110	968	1050	1010	902	949	986	854	926	992	916	951
2	1110	974	1050	1030	900	973	990	858	942	922	858	891
3	1030	930	986	1070	928	1000	1020	910	966	946	860	902
4	1080	924	993	1080	944	1010	996	872	937	1030	876	931
5	1140	974	1050	1020	864	951	920	850	889	1040	982	993
6	1040	926	1010	1060	936	1010	1090	866	946	1060	930	1000
7	1090	928	1020	1090	956	1010	1020	902	964	1080	928	1010
8	1080	944	1020	968	874	934	988	874	929	1080	932	1000
9	1070	964	1010	1130	862	957	954	730	848	970	890	935
10	998	872	958	1110	920	1010	978	858	893	1080	858	941
11	1060	882	954	1100	922	1030	1110	908	950	1090	932	1020
12	1090	932	1020	1070	902	1020	966	898	941	1060	922	994
13	1130	950	1050	1080	908	1020	1050	838	964	1080	942	1020
14	1130	940	1040	1100	886	1010	1020	892	974	1130	964	1060
15	1100	944	1050	962	834	924	1050	926	991	1130	954	1030
16	1110	956	1040	1050	884	937	1070	966	1020	990	870	955
17	1020	894	978	1100	932	1020	1050	922	995	1070	898	969
18	1030	874	959	1070	940	1040	1030	862	938	1110	988	1040
19	1080	928	1010	1060	934	1010	984	798	878	1070	916	1020
20	1070	938	1020	1050	910	1010	976	826	901	1090	958	1030
21	1080	944	1030	1110	834	966	982	874	947	1160	982	1050
22	1070	916	1020	950	814	916	1000	874	951	1070	918	1000
23	1060	918	988	976	898	934	1010	902	965	992	910	956
24	948	866	922	952	806	865	1020	926	981	1060	890	969
25	1040	850	950	854	772	823	976	876	925	1090	952	1030
26	1090	924	1020	868	782	835	896	824	872	1120	930	1030
27	1110	938	1040	888	836	852	1020	850	986	1130	954	1040
28	1130	968	1040	864	818	847	1030	868	953	1080	946	1030
29	1090	952	1030	854	806	835	966	858	929	1050	914	992
30	1060	872	983	942	812	855	988	890	950	1010	910	973
31	---	---	---	952	844	902	990	898	952	---	---	---
MONTH	1140	850	1010	1130	772	950	1110	730	948	1160	858	992
YEAR	1160	710	978									

11059300 SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CA

LOCATION.--Lat 34°04'13", long 117°17'21", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, 500 feet (150 m) upstream from E Street bridge, 0.7 mi (1.1 km) downstream from San Timoteo Creek, 1 mi (2 km) upstream from Warm Creek, 3 mi (5 km) south of San Bernardino, and 26 mi (42 km) downstream from Big Bear Lake.

DRAINAGE AREA.--532 mi^2 (1,378 km^2).

PERIOD OF RECORD.-- March 1939 to September 1954, October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 950 ft (289.6 m), from topographic map. Prior to Nov. 10, 1950, water-stage recorder on right bank 500 feet (150 m) downstream at datum 964.50 ft (293.980 m) National Geodetic Vertical Datum of 1929. Nov. 11, 1950 to Sept. 30, 1954, water-stage recorder on both banks 500 feet (150 m) downstream at datum 964.50 ft (293.980 m) NGVD. Oct. 1, 1966 to Sept. 30, 1976 water-stage recorder on right bank 500 feet (150 m) downstream at datum 954.50 ft (290.932 m) NGVD. Oct. 1, 1976 to Sept. 30, 1977 gage was removed for channel construction.

REMARKS.--Records poor. Flow partly regulated by Big Bear Lake (station 11049000) 26 mi (42 km) upstream. Natural flow of stream affected by ground-water withdrawals and diversion for domestic use and irrigation above station. Effluent from sewage reclamation plant 0.4 mi (0.6 km) upstream, causes sustained flow past gage since 1967. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--15 years (water years 1940-54), 12.5 ft^3/s (0.354 m^3/s), 9,050 acre-ft/yr (11.2 hm^3/yr); 13 years (water years 1967-79), 70.8 ft^3/s (2.005 m^3/s), 51,290 acre-ft/yr (63.2 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,000 ft^3/s (793 m^3/s) Feb. 25, 1969, gage height 11.9 ft (3.63 m), site and datum then in use; maximum gage height, 16.50 ft (5.029 m), site and datum then in use, Jan. 23, 1943, discharge uncertain, but was probably less than 8,000 ft^3/s (227 m^3/s); no flow many days prior to 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28.3 m^3/s), revised, and maximum(*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 19	1000	1,500	42.5	3.20	0.975	Mar. 27	2400	3,470	98.3	9.44	2.877
Jan. 6	0100	1,500	42.5	Unknown		Apr. 20	1300	1,580	44.7	9.15	2.789
Feb. 21	0500	*3,900	110	9.45	2.880						

Minimum daily discharge, 23 ft^3/s (0.651 m^3.s) Dec. 14-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	39	48	50	75	174	288	103	69	40	30	40
2	37	40	48	50	70	102	237	105	66	39	30	40
3	37	37	51	51	60	89	172	105	66	38	30	40
4	37	37	55	70	51	86	146	100	70	38	30	40
5	37	38	62	300	49	78	125	102	67	38	30	40
6	37	37	53	541	47	75	130	95	70	37	30	40
7	37	36	51	73	46	72	130	116	64	37	30	40
8	37	36	46	60	46	69	143	168	63	36	30	40
9	37	36	44	56	44	68	161	164	66	36	30	39
10	37	37	42	54	43	69	176	127	67	35	30	39
11	37	45	48	54	41	66	197	125	61	35	35	39
12	37	56	38	53	40	67	220	106	59	34	40	39
13	36	49	24	53	29	65	215	92	57	34	44	39
14	36	45	23	51	28	71	184	92	54	33	50	38
15	36	40	23	55	30	66	231	99	50	33	58	38
16	37	40	23	63	26	67	220	90	49	33	52	37
17	46	39	51	57	25	78	220	79	48	32	40	37
18	47	37	424	59	24	71	237	78	47	32	40	37
19	46	38	1080	50	24	143	535	76	47	32	40	36
20	46	37	424	47	24	125	1150	71	46	32	40	36
21	46	38	259	46	545	130	482	80	45	31	40	36
22	44	70	150	44	225	106	164	79	44	31	40	35
23	43	55	88	44	220	99	123	87	44	31	40	35
24	43	42	75	43	108	93	80	79	43	31	40	34
25	43	42	70	44	102	93	71	84	43	31	40	34
26	42	43	64	42	108	93	65	87	42	31	40	33
27	42	40	59	41	97	1220	65	84	42	30	40	33
28	41	40	56	42	86	1680	90	80	41	30	40	32
29	40	40	53	38	---	420	98	82	41	30	40	32
30	41	42	51	36	---	420	105	74	40	30	40	31
31	40	---	50	52	---	406	---	78	---	30	40	---
TOTAL	1239	1255	3609	2319	2313	6461	6460	2987	1611	1040	1179	1109
MEAN	40.0	41.8	116	74.8	82.6	208	215	96.4	53.7	33.5	38.0	37.0
MAX	47	70	1080	541	545	1680	1150	168	70	40	58	40
MIN	36	36	23	36	24	65	65	71	40	30	30	31
AC-FT	2460	2490	7160	4600	4590	12820	12810	5920	3200	2060	2340	2200

CAL YR 1978 TOTAL 77139 MEAN 211 MAX 7150 MIN 23 AC-FT 153000
WTR YR 1979 TOTA[redacted]6.5 MAX 1680 MIN 23 AC-FT 62640

11060400 WARM CREEK NEAR SAN BERNARDINO, CA

LOCATION.--Lat 34°04'42", long 117°17'58", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, on left bank 0.2 mi (0.3 km) downstream from State Highway 395 bridge, and 2.0 mi (3.2 km) southeast of San Bernardino.

DRAINAGE AREA.--15.0 mi² (38.9 km²).

PERIOD OF RECORD.--February 1964 to September 1972, October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 960 ft (293 m), from topographic map. Prior to Oct. 1, 1974, at site 0.1 mi (0.2 km) upstream at different datum.

REMARKS.--Records poor. Natural channel prior to September 1972; concrete-lined channel October 1974 to current year. No regulation or diversion above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--13 years (water years 1965-72, 1974-79), 7.34 ft³/s (0.208 m³/s), 5,320 acre-ft/yr (6.56 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft³/s (340 m³/s), estimated, March 1, 1978, gage height unknown; no flow some days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 853 ft³/s (24.2 m³/s), Feb. 21, gage height, 2.28 ft (0.695 m); no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	.19	6.3	3.1	55	60	.53	0	.09	.09	.09	.09
2	8.7	.19	3.8	5.2	38	7.7	.53	50	.34	.09	.09	.09
3	7.7	.49	3.7	3.6	13	3.9	.53	1.0	.09	.09	.05	.05
4	6.8	.35	5.0	1.7	8.7	1.1	.53	.20	.09	.05	.01	.34
5	6.8	.19	4.0	107	9.7	.53	.53	.10	.09	.09	0	.05
6	7.7	.19	7.4	43	9.7	.53	.53	.10	.09	.09	0	0
7	6.8	.34	9.3	5.2	8.7	.53	.53	.10	.09	.06	0	0
8	6.8	.19	3.0	2.3	11	.53	.53	25	.09	.02	.09	0
9	6.8	.19	.63	2.9	11	.53	.34	.09	.09	.07	.05	0
10	7.7	2.4	.56	2.3	10	.53	.34	.09	.09	.07	.01	0
11	6.6	71	.19	2.8	9.3	.53	.34	.09	.09	.07	1.1	0
12	6.6	6.8	.21	1.5	7.7	2.4	.34	.09	.09	.09	0	.05
13	7.9	15	.49	2.8	7.2	4.0	.34	.09	.19	.09	0	0
14	5.7	6.8	.63	6.8	21	.53	.19	.09	.19	.05	0	0
15	5.8	6.8	.25	50	9.3	.53	.19	.09	.19	.05	0	0
16	4.0	6.8	.25	27	9.6	2.4	.19	.09	.09	.05	.05	0
17	1.1	5.3	67	19	11	29	.19	.09	.09	.09	.19	0
18	1.0	4.0	56	16	11	13	.19	.09	.19	.05	0	0
19	.54	2.8	46	7.2	12	61	.09	.09	.19	.05	0	0
20	5.4	4.6	8.5	8.4	23	4.6	.09	.09	.19	1.9	0	0
21	5.8	32	7.4	8.0	122	3.4	.09	.09	.19	0	0	0
22	7.4	7.7	6.5	5.7	9.7	.91	.09	.09	.19	0	.05	0
23	3.2	2.4	4.3	7.1	35	.53	.09	.09	.09	0	0	0
24	2.5	5.3	2.3	6.5	6.0	.53	.09	.09	.09	0	0	0
25	.49	4.6	2.8	7.7	3.9	.80	0	.09	.09	.05	0	0
26	1.9	4.6	4.0	7.1	.80	.53	0	.09	.19	.07	0	0
27	3.5	2.4	2.5	7.0	4.3	128	0	.09	.34	0	.05	0
28	.42	4.0	1.0	12	3.2	37	0	.09	.34	0	0	.01
29	.19	3.0	4.1	8.7	---	6.0	0	.09	.09	0	0	0
30	.85	4.1	4.1	9.6	---	.80	0	0	.09	0	0	0
31	1.9	---	2.4	47	---	.53	---	.09	---	0	.05	---
TOTAL	146.29	204.72	264.61	444.2	480.80	372.90	7.43	78.48	4.35	3.33	1.88	.68
MEAN	4.72	6.82	8.54	14.3	17.2	12.0	.25	2.53	.15	.11	.061	.023
MAX	8.7	71	67	107	122	128	.53	50	.34	1.9	1.1	.34
MIN	.19	.19	.19	1.5	.80	.53	0	0	.09	0	0	0
AC-FT	290	406	525	881	954	740	15	156	8.6	6.6	3.7	1.3

CAL YR 1978 TOTAL 26127.02 MEAN 71.6 MAX 3400 MIN 0 AC-FT 51820
WTR YR 1979 TOTAL 2009.67 MEAN 5.51 MAX 128 MIN 0 AC-FT 3990

11060500 MEEKS AND DALEY CANAL NEAR COLTON, CA

LOCATION.--Lat 34°04'47", long 117°18'00", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, 1.5 mi (2.4 km) northeast of Colton.

PERIOD OF RECORD.--September 1920 to current year. Published with station Warm Creek near Colton, October 1950 to September 1961.

GAGE.--Water-stage recorder and sharp-crested weir. Altitude of gage is 965 ft (294 m), from topographic map.

REMARKS.--Records good. All flow passing station is pumped from ground-water basin for irrigation in vicinity of Colton, Riverside, and Corona. See schematic diagram of Santa Ana River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 25 ft³/s (0.71 m³/s) Mar. 2, 1938; no flow at times in most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	5.3	0	1.1	.96	1.7	1.1	8.2	6.8	5.6	6.5	6.6
2	6.3	5.3	0	1.1	1.1	1.7	1.1	8.2	5.9	5.6	6.4	6.6
3	6.8	5.3	.44	1.1	1.1	1.7	1.1	8.2	5.9	5.6	6.3	6.4
4	6.8	5.3	.44	1.1	1.1	1.7	1.1	7.0	5.7	5.6	6.3	6.2
5	6.9	5.3	.44	1.2	1.2	1.7	1.1	8.6	5.1	5.6	6.3	6.2
6	6.9	5.3	.44	1.1	1.4	1.6	1.1	8.6	5.2	5.7	6.0	6.2
7	6.8	5.2	.44	1.2	1.5	1.4	1.2	8.0	5.7	5.6	6.0	6.2
8	6.8	5.3	.34	1.3	1.5	1.3	1.3	7.5	5.0	5.6	6.1	6.2
9	6.8	5.3	.32	1.3	1.6	1.3	1.3	7.5	5.3	5.6	6.1	6.3
10	6.8	5.3	.32	1.1	1.7	1.3	1.3	7.5	5.8	6.1	5.9	6.0
11	6.7	5.3	.32	.96	1.7	1.3	1.3	7.5	5.8	6.4	5.9	6.1
12	6.6	1.6	.33	.96	1.7	1.3	1.3	7.5	5.8	5.9	5.9	6.1
13	6.5	0	.44	.96	1.5	1.3	1.3	7.5	5.7	5.9	5.9	6.1
14	6.5	0	.44	.96	1.1	1.3	1.3	7.5	5.9	5.9	5.9	5.9
15	5.5	0	.44	.96	1.1	1.3	1.3	7.5	5.6	5.9	5.9	5.9
16	6.5	0	.44	.96	1.1	1.3	1.8	7.5	5.6	5.9	5.9	6.0
17	6.5	0	.70	.96	1.2	1.3	1.4	7.5	5.5	5.9	6.0	6.0
18	7.2	0	1.1	.96	1.3	1.3	.57	7.5	5.3	6.2	6.1	5.7
19	6.5	0	1.1	.85	1.3	1.3	.51	7.5	5.3	6.6	6.3	5.6
20	6.5	0	1.1	.83	1.4	1.2	.03	7.5	5.3	7.0	6.3	5.6
21	6.4	.01	1.1	.83	1.5	1.1	0	7.5	5.3	7.0	6.2	5.6
22	6.4	0	1.1	.83	1.4	1.1	0	7.5	5.3	7.0	6.2	6.0
23	6.5	0	1.1	.83	1.5	1.1	.23	7.5	5.3	7.0	6.2	6.0
24	6.5	0	1.1	.88	1.5	1.1	.31	7.5	5.3	7.0	6.2	5.7
25	6.1	0	1.1	.96	1.5	1.1	5.7	7.5	5.3	7.0	6.2	5.6
26	5.6	0	1.1	.96	1.5	1.1	8.2	7.5	5.3	7.0	6.2	5.5
27	5.6	0	1.1	.91	1.5	1.1	8.2	7.7	5.6	7.0	6.2	5.3
28	5.6	0	1.1	.83	1.5	1.1	8.2	8.1	5.6	7.0	6.2	5.3
29	5.6	0	1.1	.86	---	1.1	8.2	7.5	5.6	7.0	6.2	5.3
30	5.6	0	1.1	.84	---	1.1	8.2	7.5	5.6	7.0	6.3	5.3
31	5.4	---	1.1	.96	---	1.1	---	7.5	---	7.0	6.5	---
TOTAL	197.9	59.81	21.69	30.65	38.46	40.4	69.75	237.6	166.4	195.2	190.6	177.5
MEAN	6.38	1.99	.70	.99	1.37	1.30	2.33	7.66	5.55	6.30	6.15	5.92
MAX	7.2	5.3	1.1	1.3	1.7	1.7	8.2	8.6	6.8	7.0	6.5	6.6
MIN	5.4	0	0	.83	.96	1.1	0	7.0	5.0	5.6	5.9	5.3
AC-FT	393	119	43	61	76	80	138	471	330	387	378	352

CAL YR 1978 TOTAL 467.09 MEAN 1.28 MAX 7.2 MIN 0 AC-FT 926
WTR YR 1979 TOTAL 1425.96 MEAN 3.91 MAX 8.6 MIN 0 AC-FT 2830

11062000 LYTLE CREEK NEAR FONTANA, CA

LOCATION.--Lat 34°12'44", long 117°27'20", in SE¼NW¼SE¼ sec.30, T.2 N., R.6 W., San Bernardino County, Hydrologic Unit 18070203, on right bank 75 ft (20 m) upstream from highway bridge, 0.7 mi (1.1 km) upstream from right tributary, 2.3 mi (3.7 km) downstream from Lytle Creek conduit, and 8 mi (13 km) north of Fontana.

DRAINAGE AREA.--46.3 mi^2 (119.9 km^2).

PERIOD OF RECORD.--October 1918 to current year. Combined records of Lytle Creek and diversions, October 1898 to December 1899, October 1904 to current year (published as "at mouth of canyon near Rialto" 1898-99, as "near San Bernardino" 1904-18, and as Lytle Creek and Fontana pipeline near Fontana 1919-31). Monthly discharge only for some periods published in WSP 1315-B.

GAGE.--Water-stage recorder on creek. Dual arch-culvert control since 1964. Water-stage recorders and sharp-crested weirs on conduit since June 3, 1949, and infiltration line since Oct. 1, 1971. Altitude of creek gage is 2,380 ft (725 m), from topographic map. October 1918 to Mar. 21, 1938, at site 1 mi (1.6 km) downstream at different datum. Mar. 22, 1938, to Nov. 20, 1963, at site 75 ft (20 m) downstream at datum 4.58 ft (1.396 m) lower. Sharp-crested weirs at different datum.

REMARKS.--Records, creek only, poor; combined creek and diversion, poor. No regulation above station. Southern California Edison Co.'s Lytle Creek conduit diverts 2.3 mi (3.7 km) upstream for power development, and Fontana Union Water Co. collects water from an infiltration line upstream for irrigation. See schematic diagram of Santa Ana River basin. For records of combined discharge of Lytle Creek and diversions, see following page.

AVERAGE DISCHARGE.--Creek only: 61 years, 15.9 ft^3/s (0.450 m^3/s), 11,520 acre-ft/yr (14.2 hm^3/yr).
Combined creek and diversions: 76 years (water years 1899, 1905-79), 43.7 ft^3/s (1.238 m^3/s), 31,660 acre-ft/yr (39.0 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 35,900 ft^3/s (1,020 m^3/s) Jan. 25, 1969, gage height, 15.0 ft (4.57 m), from floodmark, from rating curve extended above 570 ft^3/s (16.1 m^3/s) on basis of slope-area measurements at gage heights 10.78 ft (3.286 m) and 15.0 ft (4.57 m); no flow at times each year.
Combined creek and diversions: Maximum discharge, 35,900 ft^3/s (1,020 m^3/s) Jan. 25, 1969; minimum daily, 0.12 ft^3/s (0.003 m^3/s) June 21, 22, 1976.

EXTREMES FOR CURRENT YEAR.--Creek only: Maximum discharge, 340 ft^3/s (9.63 m^3/s) Mar. 27 (1030 hrs), gage height, 4.84 ft (1.475 m), no other peak above base of 300 ft^3/s (8.50 m^3/s); minimum daily 9.4 ft^3/s (0.266 m^3/s) Dec. 14-16.
Combined creek and diversion: Maximum discharge, 356 ft^3/s (10.1 m^3/s) Mar. 27; minimum daily, 39 ft^3/s (1.10 m^3/s) Dec. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	19	14	13	72	50	44	68	44	55	34	30
2	32	18	14	12	45	46	55	68	44	53	39	30
3	30	17	14	11	34	42	55	64	44	55	32	30
4	28	17	13	11	27	39	55	64	42	88	25	30
5	28	17	12	32	23	39	55	64	39	80	25	34
6	30	16	12	34	21	42	60	64	42	44	21	37
7	30	16	11	21	19	42	66	64	42	37	23	34
8	30	16	11	19	18	44	60	64	37	42	21	30
9	30	16	11	18	18	44	70	60	32	28	21	26
10	28	20	11	17	19	44	60	56	22	26	20	23
11	26	25	11	16	19	42	60	55	23	14	21	32
12	23	12	10	15	18	44	72	[illegible]	20	12	22	32
13	23	19	10	14	20	46	80	52	44	15	22	31
14	23	17	9.4	16	33	44	97	46	74	16	23	30
15	25	17	9.4	62	23	42	100	46	79	17	22	29
16	26	17	9.4	74	21	42	97	46	87	17	27	28
17	23	17	37	57	20	44	97	46	92	18	27	27
18	23	16	70	48	19	42	80	46	102	14	26	27
19	23	16	43	37	21	50	80	62	104	14	26	26
20	22	16	31	32	24	46	87	97	97	16	26	26
21	22	25	30	28	91	44	74	100	104	20	26	25
22	22	19	25	25	55	39	72	93	118	23	26	25
23	22	17	21	23	50	37	72	97	115	26	26	25
24	22	16	19	40	44	37	70	93	93	20	30	25
25	22	16	18	23	39	34	60	93	77	26	34	24
26	21	15	17	21	39	34	60	89	68	30	28	24
27	20	15	17	21	39	183	60	73	60	20	30	24
28	19	14	16	20	37	145	60	68	55	42	28	24
29	19	14	14	19	---	95	66	66	52	42	28	23
30	20	14	14	19	---	60	70	66	50	39	30	23
31	20	---	13	18	---	46	---	65	---	37	28	---
TOTAL	762	509	567.2	816	908	1628	2156	2011	1902	990	817	834
MEAN	24.6	17.0	18.3	26.3	32.4	52.5	71.9	64.9	63.4	31.9	26.4	27.8
MAX	32	25	70	74	91	183	100	100	118	88	39	37
MIN	19	12	9.4	11	18	34	44	45	20	12	20	23
AC-FT	1510	1010	1130	1620	1800	3230	4280	3990	3770	1960	1620	1650

CAL YR 1978 TOTAL 54685.2 MEAN 150 MAX 3500 MIN 9.4 AC-FT 108500
WTR YR 1979 TOTAL 13900.2 MEAN 38.1 MAX 183 MIN 9.4 AC-FT 27570

11062000 LYTLE CREEK NEAR FONTANA, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF LYTLE CREEK, SOUTHERN CALIFORNIA EDISON CO.'S LYTLE CONDUIT, AND FONTANA UNION WATER CO.'S INFILTRATION LINE, NEAR FONTANA, CA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	52	45	45	111	84	73	104	86	93	78	66
2	74	51	45	44	94	80	89	108	84	92	77	63
3	72	50	43	42	72	80	95	106	86	94	78	62
4	70	49	41	42	65	77	96	108	82	127	62	61
5	69	49	40	44	61	77	96	108	79	107	63	64
6	71	48	40	68	59	80	101	106	82	83	58	72
7	71	49	39	57	57	81	106	110	82	76	59	64
8	71	49	40	54	56	83	102	109	77	81	57	65
9	70	48	42	53	56	83	111	104	71	67	57	68
10	68	55	42	51	57	83	109	99	68	65	55	57
11	66	62	43	50	57	81	109	98	62	54	56	66
12	63	48	41	49	56	83	113	95	59	52	58	66
13	62	54	41	47	58	86	120	95	83	55	58	65
14	62	51	41	50	69	83	119	89	112	56	59	64
15	63	51	41	96	61	81	124	89	117	57	57	62
16	63	51	41	102	60	80	121	89	125	57	62	61
17	61	51	68	90	61	82	127	88	131	57	62	60
18	60	50	99	85	59	79	126	88	141	54	61	60
19	60	49	71	74	61	89	123	104	142	54	61	58
20	60	50	59	71	64	84	120	139	135	56	61	58
21	59	57	61	66	126	80	116	141	142	59	61	57
22	58	48	61	62	94	75	116	135	156	62	60	57
23	58	46	56	60	93	73	116	138	153	65	60	57
24	58	47	53	71	85	73	114	134	131	87	65	57
25	58	48	52	60	79	70	112	133	115	85	69	56
26	56	47	50	57	79	70	112	129	106	70	62	52
27	55	47	50	57	78	199	110	113	97	67	64	52
28	53	45	49	56	75	149	105	88	93	82	61	53
29	53	45	47	54	---	102	99	88	90	81	61	51
30	54	45	47	54	---	85	103	89	88	78	63	50
31	54	---	46	56	---	78	---	85	---	75	61	---
TOTAL	1944	1492	1534	1887	1993	2690	3283	3311	3063	2208	1918	1804
MEAN	62.7	49.7	49.5	60.9	71.2	86.8	109	107	102	71.2	61.9	60.1
MAX	74	62	99	102	126	199	127	141	156	127	78	72
MIN	53	45	39	42	56	70	73	85	59	52	55	50
AC-FT	3860	2960	3040	3740	3950	5340	6510	6570	6080	4380	3800	3580

CAL YR 1978 TOTAL 65514 MEAN 179 MAX 3510 MIN 38 AC-FT 129900
WTR YR 1979 TOTAL 27127 MEAN 74.3 MAX 199 MIN 39 AC-FT 53810

11063000 CAJON CREEK NEAR KEENBROOK, CA

LOCATION.--Lat 34°16'01", long 117°27'33", in SE¼SW¼SE¼ sec.12, T.2 N., R.6 W., San Bernardino County, Hydrologic Unit 18070203, on left bank 1,300 ft (400 m) upstream from Lone Pine Creek and 1.2 mi (1.9 km) north of Keenbrook.

DRAINAGE AREA.--40.6 mi² (105.2 km²).

PERIOD OF RECORD.--December 1919 to September 1971, October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,630 ft (802 m), from topographic map. Prior to Oct. 24, 1935, at site 1,300 ft (400 m) downstream at different datum. Oct. 24, 1935, to Jan. 26, 1966, at site 500 ft (150 m) upstream at datum 6.68 ft (2.036 m) higher.

REMARKS.--Records poor. No regulation or diversion above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--53 years (1920-71, 1979), 10.6 ft³/s (0.300 m³/s), 7,680 acre-ft/yr (9.47 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,500 ft³/s (411 m³/s) Mar. 2, 1938, gage height, 26.0 ft (7.92 m) datum then in use, on basis of slope-area measurement of peak flow; minimum daily, 0.05 ft³/s (0.001 m³/s) June 25, 1920.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 79 ft³/s (2.24 m³/s), estimated, Mar. 27; minimum daily 5.9 ft³/s (0.17 m³/s) Nov. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	6.2	7.9	10	50	37	42	14	9.1	7.6	7.0	6.8
2	6.2	6.2	7.8	10	39	32	34	14	9.0	7.6	7.0	6.8
3	6.2	6.2	7.8	10	25	27	28	13	9.0	7.6	7.0	6.8
4	6.2	6.2	7.8	10	22	23	26	13	8.9	7.5	7.0	6.8
5	6.2	6.2	7.8	20	19	21	24	13	8.8	7.5	7.0	6.8
6	6.2	6.1	7.8	25	18	18	23	13	8.8	7.5	7.0	6.7
7	6.2	6.1	7.8	12	17	17	22	13	8.7	7.5	7.0	6.7
8	6.2	6.0	7.8	11	16	15	21	13	8.6	7.5	7.0	6.7
9	6.2	5.9	7.8	10	16	14	21	13	8.5	7.4	7.0	6.6
10	6.2	6.8	7.8	10	15	14	20	13	8.5	7.4	7.0	6.6
11	6.2	7.0	7.8	10	15	14	20	13	8.4	7.4	6.9	6.6
12	6.2	6.7	7.8	10	15	13	20	13	8.3	7.4	6.9	6.6
13	6.2	6.3	7.8	10	30	13	19	13	8.3	7.4	6.9	6.5
14	6.2	6.1	7.8	11	25	13	18	13	8.2	7.4	6.9	6.5
15	6.2	6.0	7.8	50	20	13	19	13	8.2	7.3	6.9	6.5
16	6.2	6.0	11	40	19	13	18	13	8.1	7.3	6.9	6.5
17	6.2	6.0	48	34	19	13	19	13	8.1	7.3	6.9	6.4
18	6.2	6.0	51	27	18	13	17	13	8.0	7.3	6.9	6.4
19	6.2	6.0	16	20	18	22	17	13	8.0	7.3	6.9	6.4
20	6.2	6.0	12	16	18	32	17	13	7.9	7.3	6.9	6.4
21	6.2	25	11	15	41	22	16	13	7.9	7.2	6.9	6.3
22	6.2	15	10	14	30	19	16	13	7.8	7.2	6.9	6.3
23	6.2	12	10	14	25	17	16	13	7.8	7.2	6.8	6.3
24	6.2	12	10	14	23	16	15	12	7.8	7.2	6.8	6.3
25	6.2	10	10	13	22	15	15	12	7.8	7.2	6.8	6.3
26	6.2	9.4	10	13	21	15	15	11	7.8	7.2	6.8	6.2
27	6.2	9.0	10	13	20	79	15	11	7.8	7.2	6.8	6.2
28	6.2	8.6	10	13	20	57	14	10	7.7	7.1	6.8	6.2
29	6.2	8.4	10	13	---	43	14	10	7.7	7.1	6.8	6.2
30	6.2	8.2	10	13	---	58	14	9.5	7.7	7.0	6.8	6.1
31	6.2	---	10	24	---	58	---	9.3	---	7.0	6.8	---
TOTAL	192.2	241.6	366.1	515	636	776	595	385.8	247.2	227.1	214.0	194.5
MEAN	6.20	8.05	11.8	16.6	22.7	25.0	19.8	12.4	8.24	7.33	6.90	6.48
MAX	6.2	25	51	50	50	79	42	14	9.1	7.6	7.0	6.8
MIN	6.2	5.9	7.8	10	15	13	14	9.3	7.7	7.0	6.8	6.1
AC-FT	381	479	726	1020	1260	1540	1180	765	490	450	424	386

CAL YR 1978 TOTAL 32492.8 MEAN 89.0 MAX 3220 MIN 2.1 AC-FT 64450
WTR YR 1979 TOTAL 4590.5 MEAN 12.6 MAX 79 MIN 5.9 AC-FT 9110

11063500 LONE PINE CREEK NEAR KEENBROOK, CA

LOCATION.--Lat 34°15'59", long 117°27'47", in SE¼SE¼SW¼ sec.12, T.2 N., R.6 W., San Bernardino County, Hydrologic Unit 18070203, on right bank 50 ft (15 m) upstream from the Atchison, Topeka, and Santa Fe Railway Co. bridge, 150 ft (46 m) upstream from mouth, and 1.1 mi (1.8 km) north of Keenbrook.

DRAINAGE AREA.--15.1 mi^2 (39.1 km^2).

PERIOD OF RECORD.--December 1919 to September 1938, June 1949 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,605.92 ft (794.284 m) National Geodetic Vertical Datum of 1929. Prior to Mar. 2, 1938, water-stage recorder (destroyed by flood) and Mar. 2 to Sept. 30, 1938, nonrecording gage at same site at datum 0.98 ft (0.299 m) higher.

REMARKS.--Records fair. No regulation or diversion above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--48 years (water years 1921-38, 1950-79) 1.60 ft^3/s (0.045 m^3/s), 1,160 acre-ft/yr (1.43 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,180 ft^3/s (175 m^3/s) Mar. 2, 1938, on basis of slope-area measurement of maximum flow; no flow Aug. 6-8, Sept. 29, 30, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 63 ft^3/s (1.78 m^3/s) Mar. 27, gage height, 2.44 ft (0.744 m); minimum daily, 1.6 ft^3/s (0.045 m^3/s) July 28 to Aug. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	4.8	5.2	3.3	7.8	4.5	4.0	5.2	4.8	3.2	1.6	2.6
2	5.4	4.8	5.1	3.4	5.0	4.1	3.8	7.0	4.4	3.2	1.8	2.4
3	5.3	4.7	4.3	3.4	4.2	4.0	3.8	5.4	4.3	3.4	1.8	2.6
4	5.3	4.4	4.1	3.4	4.0	4.0	3.8	5.3	4.2	3.4	1.8	2.6
5	5.3	4.2	4.3	6.9	3.9	4.0	3.9	5.0	4.1	3.6	1.9	2.5
6	5.3	4.2	4.3	4.7	3.9	4.0	4.0	6.0	4.0	3.6	1.9	2.5
7	4.8	4.2	4.1	3.7	4.0	4.0	5.5	5.4	3.9	3.2	2.1	2.4
8	4.5	3.9	4.2	3.5	4.0	4.0	4.9	6.0	3.9	3.2	2.1	2.5
9	4.8	4.0	4.2	3.6	4.2	4.0	4.4	6.8	3.8	3.2	2.3	2.6
10	4.8	4.4	4.1	3.6	4.3	4.0	4.4	6.0	3.7	2.8	2.3	2.8
11	4.8	4.5	3.8	3.6	3.9	4.0	5.1	5.4	3.6	2.8	2.3	2.8
12	4.8	3.9	3.6	3.5	3.6	4.1	5.7	5.4	3.4	2.8	2.3	2.8
13	5.0	3.9	3.5	3.5	3.5	4.2	5.7	5.4	3.6	2.6	2.3	2.5
14	4.5	3.9	3.6	3.6	3.9	4.4	5.8	5.7	3.6	2.6	2.3	2.4
15	4.3	3.5	3.6	7.2	3.8	4.3	5.8	6.0	3.6	2.4	2.3	2.4
16	4.5	3.4	3.6	5.9	3.8	4.3	5.8	6.3	3.8	2.3	2.4	2.4
17	4.8	3.6	5.1	4.7	3.9	4.2	5.8	6.0	3.6	2.3	2.3	2.4
18	4.8	3.6	5.5	3.7	3.8	4.2	5.7	5.7	3.4	2.4	2.3	2.4
19	4.5	3.3	4.8	3.6	3.8	4.0	5.7	5.4	3.6	2.4	2.4	2.4
20	4.8	3.3	4.2	3.6	3.8	4.1	5.7	5.4	3.6	2.3	2.3	2.4
21	4.8	5.1	3.9	3.6	5.0	4.2	5.6	5.4	3.8	2.4	2.3	2.4
22	4.3	5.6	3.8	3.6	7.6	4.0	5.6	5.3	3.8	2.3	2.4	2.4
23	4.3	5.3	3.7	3.1	4.2	4.0	5.6	5.0	3.6	1.8	2.3	2.4
24	4.5	5.3	3.6	3.2	3.8	4.0	5.6	5.0	3.4	1.9	2.1	2.4
25	4.5	5.3	3.6	3.4	3.8	3.9	5.5	5.0	2.8	1.9	2.1	2.4
26	4.5	5.0	3.5	3.2	3.8	3.7	5.5	4.8	3.0	1.8	2.3	2.4
27	4.5	5.2	3.4	3.1	3.8	21	5.4	4.3	3.6	1.8	2.3	2.4
28	4.5	5.3	3.4	3.1	3.8	11	5.4	4.5	3.6	1.6	2.6	2.5
29	4.3	5.2	3.4	3.1	---	4.0	5.4	4.6	3.4	1.6	2.6	2.6
30	4.5	5.0	3.4	3.2	---	4.0	5.3	4.7	3.2	1.6	2.4	2.5
31	4.8	---	3.4	3.9	---	3.8	---	5.0	---	1.6	2.6	---
TOTAL	147.1	132.8	124.3	118.9	118.9	150.0	154.2	168.4	111.1	78.0	68.8	74.8
MEAN	4.75	4.43	4.01	3.84	4.25	4.84	5.14	5.43	3.70	2.52	2.22	2.49
MAX	5.4	5.6	5.5	7.2	7.8	21	5.8	7.0	4.8	3.6	2.6	2.8
MIN	4.3	3.3	3.4	3.1	3.5	3.7	3.8	4.3	2.8	1.6	1.6	2.4
AC-FT	292	263	247	236	236	298	306	334	220	155	136	148

CAL YR 1978 TOTAL 3773.16 MEAN 10.3 MAX 266 MIN .7 AC-FT 7480
WTR YR 1979 TOTAL 1447.30 MEAN 3.97 MAX 21 MIN 1.6 AC-FT 2870

11063680 DEVIL CANYON CREEK NEAR SAN BERNARDINO, CA

LOCATION.--Lat 34°12'30", long 117°19'50", in Muscupiabe Grant, San Bernardino County, Hydrologic Unit 18070203, on left bank 0.6 mi (1.0 km) downstream from confluence of East and West Forks, and 7.5 mi (12.1 km) northwest of San Bernardino.

DRAINAGE AREA.--5.49 mi^2 (14.22 km^2).

PERIOD OF RECORD.--November 1911 to September 1912, October 1913 to September 1914, December 1919 to current year. Monthly figures only for January 1914, published in WSP 1315-B.

GAGE.--Water-stage recorder on creek; flowmeter on diversion. Altitude of gage is 2,080 ft (634 m), from topographic map. Prior to December 1919, nonrecording gage at site 0.5 mi (0.8 km) downstream at different datum. December 1919 to July 1969, at site 0.4 mi (0.6 km) downstream at different datum. July 1969 to September 1972, present gage used as supplementary gage. Oct. 1, 1973, to Feb. 25, 1974, supplementary gage at site 0.5 mi (0.8 km) downstream at different datum.

REMARKS.--Records poor. No regulation above station. City of San Bernardino diverts above station for municipal supply. See schematic diagram of Santa Ana River basin. No gage-height record Jan. 1 to Mar. 6.

COOPERATION.--Records of diversion were furnished by city of San Bernardino.

AVERAGE DISCHARGE.--Creek only: 60 years (water years 1914, 1921-79), 2.07 ft^3/s (0.059 m^3/s), 1,500 acre-ft/yr (1.85 hm^3/yr).
Combined creek and diversion.--46 years (water years 1914, 1935-79), 3.85 ft^3/s (0.11 m^3/s), 2,790 acre-ft/yr (3.44 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD (1913-14 AND SINCE 1919).--Maximum discharge, 3,720 ft^3/s (105 m^3/s) Jan. 25, 1969, gage height, 5.40 ft (1.646 m), site and datum then in use, on basis of slope-area measurement of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 25 ft^3/s (0.71 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 3	1815	56	1.59	4.78	1.457	Feb. 22	Unknown	Unknown		Unknown	
Dec. 17	1800	*85	2.41	4.99	1.521	Mar. 27	1130	43	1.22	4.66	1.420
Jan. 6	0430	27	0.76	4.52	1.378	Mar. 29	1245	52	1.47	4.74	1.445
Jan. 15	1115	36	1.02	4.62	1.408	May 2	0815	30	0.85	4.42	1.347
Feb. 1	Unknown	Unknown		Unknown							

Minimum daily discharge, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	2.1	.23	17	11	8.3	12	.91	.07		
2	0	0	2.4	.30	7.0	2.1	6.9	24	.68	.08		
3	0	0	19	1.6	1.5	.64	4.7	17	.33	.08		
4	0	0	28	5.2	.50	.62	3.6	8.0	.35	.08		
5	0	0	1.8	10	.46	.60	2.2	5.5	.44	.08		
6	0	0	2.8	16	.46	.58	2.0	9.8	.76	.08		
7	0	0	.22	9.6	.48	.58	1.8	6.1	.77	.08		
8	0	0	.24	6.6	.49	.61	1.7	5.2	2.3	.07		
9	0	0	.31	6.4	.50	.58	2.3	3.4	.88	.06		
10	0	.20	.48	.36	.52	.56	2.2	2.5	.39	.05		
11	0	6.8	.61	.19	.50	.55	1.7	2.3	.09	.04		
12	0	4.4	.58	.39	.48	.55	3.7	1.8	.09	.03		
13	0	2.6	.54	.14	.47	.57	6.6	1.8	.09	.03		
14	0	2.0	.47	2.8	5.0	.60	4.8	1.9	.08	.02		
15	0	.99	.50	18	.50	4.4	3.4	1.9	.08	.02		
16	0	.58	.58	18	.45	8.2	2.2	2.0	.09	.01		
17	0	.33	21	11	.43	11	2.5	1.6	.09	.01		
18	.01	.19	11	7.8	.42	9.5	2.3	1.3	.10	0		
19	0	.10	8.7	7.1	.42	12	.81	.89	.11	0		
20	.94	1.6	7.9	1.9	.45	9.5	.54	.91	.10	0		
21	4.1	4.6	6.5	1.5	5.2	8.9	.40	.86	.09	0		
22	4.2	4.7	5.0	1.3	35	7.9	.31	.79	.09	0		
23	2.3	1.8	2.5	.96	20	7.1	1.0	1.1	.09	0		
24	.18	.49	1.3	.85	9.8	3.8	.41	1.3	.09	0		
25	.14	.25	.70	4.5	5.0	1.5	.30	1.3	.09	0		
26	.09	.15	.39	2.9	2.0	2.9	.16	1.3	.08	0		
27	.05	.15	.23	.38	1.0	19	.05	1.4	.08	0		
28	.02	.20	.22	.33	.60	27	5.8	1.6	.08	0		
29	.01	.12	.19	.28	---	21	18	1.4	.07	0		
30	.01	.08	.17	.65	---	16	15	1.3	.07	0		
31	0	---	.17	7.0	---	11	---	1.2	---	0		---
TOTAL	12.05	32.33	126.60	144.26	116.63	200.84	105.68	123.45	9.56	.89	0	0
MEAN	.39	1.08	4.08	4.65	4.17	6.48	3.52	3.98	.32	.029	0	0
MAX	4.2	6.8	28	18	35	27	18	24	2.3	.08	0	0
MIN	0	0	.17	.14	.42	.55	.05	.79	.07	0	0	0
AC-FT	24	64	251	286	231	398	210	245	19	1.8	0	0
a	213	257	481	519	422	57	477	538	297	211	169	132

CAL YR 1978 TOTAL 4504.55 MEAN 12.3 MAX 260 MIN 0 AC-FT 8930 a 11430
WTR YR 1979 TOTAL 872.29 MEAN 2.39 MAX 35 MIN 0 AC-FT 1730 a 4290

a Combined discharge, in acre-feet, of Devil Canyon Creek and city of San Bernardino diversion.

11065000 LYTLE CREEK AT COLTON, CA

LOCATION.--Lat 34°04'44", long 117°18'17", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, on right bank 400 ft (120 m) downstream from Colton Avenue, 1,930 ft (588 m) upstream from outlet end of channel, and 1.3 mi (2.1 km) northeast of Colton.

DRAINAGE AREA.--172 mi^2 (445 km^2).

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 974.67 ft (297.079 m) Corps of Engineers datum.

REMARKS.--Records poor. Flow partly regulated by Lytle Creek spreading grounds 3.2 mi (5.1 km) upstream. Diversions above station for irrigation, power development, domestic use, and ground-water replenishment. See schematic diagram of Santa Ana River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,500 ft^3/s (496 m^3/s) Mar. 4, 1978, gage height, 14.8 ft (4.51 m), from rating curve extended above 4,200 ft^3/s (119 m^3/s) on basis of discharge for design flood at gage height 21.4 ft (6.52 m); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,035 ft^3/s (29.3 m^3/s) Mar. 27, gage height, 3.05 ft (0.930 m); no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.09	0	28	1.0		0				
2	0	0	0	0	18	0		5.2				
3	0	0	0	0	.45	0		0				
4	0	0	0	0	0	0		0				
5	0	0	0	69	0	0		0				
6	0	0	0	28	0	0		0				
7	0	0	0	0	0	0		0				
8	0	0	0	0	0	0		7.0				
9	0	0	0	0	0	0		0				
10	0	0	0	0	0	0		0				
11	0	62	0	0	0	0		0				
12	0	1.3	0	0	0	3.1		0				
13	0	6.2	0	0	0	0		0				
14	0	0	0	.98	9.1	0		0				
15	0	0	0	13	0	0		0				
16	0	0	0	25	0	0		0				
17	0	0	42	8.2	0	36		0				
18	0	0	20	4.1	0	24		0				
19	0	0	18	0	0	137		0				
20	.63	0	0	0	2.2	0		0				
21	0	20	0	0	64	0		0				
22	0	0	0	0	3.0	0		0				
23	0	0	0	0	.50	0		0				
24	0	0	0	0	0	0		0				
25	0	0	0	1.6	0	0		0				
26	0	0	0	0	0	0		0				
27	0	0	0	0	0	340		0				
28	0	0	0	.54	0	318		0				
29	0	0	0	0	---	132		0				
30	0	0	0	.91	---	56		0				
31	0	---	0	20	---	18	---	0	---			---
TOTAL	.63	89.5	80.09	171.33	125.25	1065.1	0	12.2	0	0	0	0
MEAN	.020	2.98	2.58	5.53	4.47	34.4	0	.39	0	0	0	0
MAX	.63	62	42	69	64	340	0	7.0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	1.2	178	159	340	248	2110	0	24	0	0	0	0

CAL YR 1978 TOTAL 18837.67 MEAN 51.6 MAX 3870 MIN 0 AC-FT 37360
WTR YR 1979 TOTAL 1544.10 MEAN 4.23 MAX 340 MIN 0 AC-FT 3060

11066440 SANTA ANA RIVER AT MISSION BOULEVARD, AT RIVERSIDE, CA

LOCATION.--Lat 33°59'28", long 117°23'36", in Jurupa Grant, Riverside County, Hydrologic Unit 18070203. near right bank on downstream end of pier of Mission Boulevard Bridge between Rubidoux and Riverside.

DRAINAGE AREA.--810 mi² (2,098 km²).

PERIOD OF RECORD.--February 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 758.52 ft (231.197 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. This is a project station the purpose of which is to record surface flow entering Riverside narrows from upper Santa Ana River drainage. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--8 years, 35.9 ft³/s (1.017 m³/s), 26,010 acre-ft/yr (32.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 18,600 ft³/s (527 m³/s) Mar. 4, 1978, gage height, 12.60 ft (3.840 m), on basis of slope-conveyance study of maximum flow; maximum gage height, 13.35 ft (4.069 m) Feb. 10, 1978; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42.5 m³/s) and maximum (*), on basis of rating extended to slope-conveyance studies of 16,600 ft³/s (470 m³/s) and 18,600 ft³/s (527 m³/s):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 18	1600	4,500	127	10.55	3.216	Feb. 21	0700	3,170	89.8	10.35	3.155
Jan. 6	0330	(a)		*10.70	3.261	Mar. 27	1515	*5,560	157	10.61	3.234

(a) Temporary control dike

Minimum daily discharge, no flow much of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	0	169	180	130	3.3				
2		0	0	0	77	122	110	200				
3		0	0	0	.44	.90	80	90				
4		0	0	0	0	0	64	40				
5		0	0	200	0	0	45	30				
6		0	0	600	0	0	11	25				
7		0	0	98	0	0	11	20				
8		0	0	0	0	0	2.9	150				
9		0	0	0	0	0	7.0	150				
10		0	0	0	0	0	4.3	50				
11		6.8	0	0	0	0	1.2	30				
12		1.4	0	0	0	0	.80	20				
13		0	0	0	0	0	.47	10				
14		.04	0	0	0	4.4	.47	6.0				
15		0	0	8.1	0	.01	1.2	3.0				
16		0	0	20	0	.07	.93	2.5				
17		0	3.7	12	0	106	.87	2.0				
18		0	887	9.0	0	180	.07	1.7				
19		0	509	0	0	260	6.2	1.2				
20		0	0	0	0	150	207	1.0				
21		.27	0	0	644	140	250	.80				
22		.15	0	0	219	130	7.9	.60				
23		0	0	0	284	80	8.9	.40				
24		0	0	0	3.7	19	1.5	.20				
25		0	0	0	23	5.7	2.0	.20				
26		0	0	0	4.6	4.7	.67	.10				
27		0	0	0	5.7	1000	2.2	0				
28		0	0	0	0	1600	2.9	0				
29		0	0	0	---	1000	7.9	0				
30		0	0	0	---	384	4.8	0				
31		---	0	134	---	200	---	0	---			---
TOTAL	0	8.66	1399.7	1081.1	1430.44	5566.78	973.18	838.00	0	0	0	0
MEAN	0	.29	45.2	34.9	51.1	180	32.4	27.0	0	0	0	0
MAX	0	6.8	887	600	644	1600	250	200	0	0	0	0
MIN	0	0	0	0	0	0	.07	0	0	0	0	0
AC-FT	0	17	2780	2140	2840	11040	1930	1660	0	0	0	0

CAL YR 1978 TOTAL 72451.55 MEAN 198 MAX 6920 MIN 0 AC-FT 143700
WTR YR 1979 TOTAL 11297.86 MEAN 31.0 MAX 1600 MIN 0 AC-FT 22410

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CA

LOCATION.--Lat 33°58'04", long 117°26'46", in NE¼NE¼SW¼ sec. 30, T.2 S., R.5 W., Riverside County, Hydrologic Unit 18070203, on left bank 300 ft (91 m) upstream from MWD crossing, 0.7 mi (1.1 km) downstream from Union Pacific Railroad bridge, 1.2 mi (1.9 km) upstream from bridge on Van Buren Boulevard, and 3.3 mi (5.3 km) north of Arlington.

DRAINAGE AREA.--854 mi² (2,110 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1970 to current year.

GAGE.--Water-stage recorder and concrete low-flow control. Altitude of gage is 685 ft (209 m), from topographic map.

REMARKS.--Records fair except for periods of no gage-height record, Dec. 21 to Jan. 2 and May 30 to Sept. 30, which are poor. Flow partly regulated by Big Bear Lake (station 11049000). Natural streamflow affected by ground-water withdrawals, diversions for irrigation, and return flows from irrigated areas. The records at this station are equivalent to those collected at 11066500 Santa Ana River at Riverside Narrows, near Arlington minus the flow at 11066480 Riverside Water Quality Control Plant at Riverside Narrows, near Arlington. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--9 years, 61.5 ft³/s (1.742 m³/s), 44,560 acre-ft/yr (54.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 19,500 ft³/s (552 m³/s) Mar. 4, 1978, by flood routing, gage height, 20.23 ft (6.166 m); minimum daily, 16 ft³/s (0.45 m³/s) Aug. 18, 19, 1973.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1927, 100,000 ft³/s (2,830 m³/s) Mar. 2, 1938, on basis of slope-area measurement at site 1.2 mi (1.9 km) downstream. Flood of Jan. 22, 1862, 320,000 ft³/s (9,060 m³/s), by slope-conveyance measurement at site 8.1 mi (13.0 km) upstream. Stage at that site was 5 ft (2 m) higher than Mar. 2, 1938.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42.5 m³/s) and maximum(*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 6	0300	*3,850	109	12.05	3.673
Mar. 27	1600	2,770	78.4	11.57	3.527

Minimum daily discharge, 25 ft³/s (0.71 m³/s) Oct. 8, 9, 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	36	29	28	188	176	130	106	32	38	31	33
2	29	36	31	28	150	112	111	183	32	38	32	33
3	27	38	31	27	104	81	93	89	32	38	32	32
4	26	37	34	26	52	85	83	46	35	38	33	32
5	34	38	30	173	39	87	79	44	37	38	33	31
6	31	37	26	868	40	89	93	53	37	38	33	31
7	27	40	31	70	40	91	104	53	36	37	33	32
8	25	37	31	63	46	91	102	142	35	37	34	33
9	25	37	33	72	48	95	108	150	35	36	34	33
10	29	37	35	76	48	93	111	61	36	35	34	34
11	30	78	32	78	46	97	102	61	29	35	35	34
12	32	71	30	74	46	93	106	46	36	34	35	35
13	30	40	32	78	45	99	111	46	36	33	35	35
14	25	38	31	85	48	97	120	46	37	33	35	35
15	25	37	29	99	48	93	111	50	37	32	36	36
16	29	36	29	99	46	93	111	46	37	31	36	36
17	34	33	70	95	46	144	97	40	37	31	36	36
18	31	32	186	99	46	138	99	40	37	30	37	36
19	31	33	158	85	48	267	174	41	37	29	37	36
20	39	34	43	79	49	108	276	40	37	29	37	37
21	38	53	37	79	250	118	235	41	37	28	37	37
22	36	32	35	87	203	91	141	46	37	27	38	37
23	35	30	33	91	152	93	81	50	37	27	38	37
24	36	31	32	91	89	83	72	52	37	26	37	37
25	37	29	31	91	83	79	69	46	37	27	37	38
26	38	30	30	87	83	70	74	44	38	27	36	38
27	38	29	30	87	85	717	85	41	38	28	36	38
28	37	29	29	99	91	1330	99	44	38	29	35	38
29	37	30	29	95	---	468	106	40	38	29	35	38
30	38	30	28	95	---	186	104	33	38	30	34	39
31	38	---	28	207	---	141	---	32	---	31	34	---
TOTAL	999	1128	1293	3411	2259	5605	3387	1852	1082	999	1085	1057
MEAN	32.2	37.6	41.7	110	80.7	181	113	59.7	36.1	32.2	35.0	35.2
MAX	39	78	186	868	250	1330	276	183	38	38	38	39
MIN	25	29	26	26	39	70	69	32	29	26	31	31
AC-FT	1980	2240	2560	6770	4480	11120	6720	3670	2150	1980	2150	2100

CAL YR 1978 TOTAL 87011 MEAN 238 MAX 6800 MIN 25 AC-FT 172600
WTR YR 1979 TOTAL 24157 MEAN 66.2 MAX 1330 MIN 25 AC-FT 47920

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to current year.
CHEMICAL ANALYSES: Water years 1970 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1969 to September 1978.

INSTRUMENTATION.--Specific conductance recorder October 1969 to September 1978.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,320 micromhos Nov. 4, 1969; minimum recorded, 95 micromhos Nov. 27, 1970.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT					
03...	1100	27	1090	23.5	713
NOV					
01...	1245	35	1127	22.0	722
DEC					
04...	1105	33	1140	16.0	733
JAN					
02...	1430	27	1130	13.5	721
08...	1200	67	898	15.5	529
FEB					
05...	1210	37	1080	7.0	673
MAR					
02...	1230	108	790	17.0	417
MAY					
02...	1415	207	467	22.0	295
JUN					
12...	1500	37	1130	31.0	706
JUL					
06...	1430	38	1080	28.0	714
24...	1450	26	1090	28.0	675
AUG					
02...	0930	31	1080	23.0	706
23...	1345	30	1150	28.0	702
SEP					
06...	1300	31	1120	29.0	679

11066480 RIVERSIDE WATER QUALITY CONTROL PLANT AT RIVERSIDE NARROWS, NEAR ARLINGTON, CA

LOCATION.--Lat 33°57'53", long 117°27'20", in SW¼NE¼SE¼ sec.25, T.2 S., R.6 W., Riverside County, Hydrologic Unit 18070203, at effluent end of chlorine contact chambers, 0.4 mi (0.6 km) upstream from Van Buren Boulevard, and 3.1 mi (5.0 km) northwest of Arlington.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1967 to current year. Prior to May 25, 1967, published as "Sheehan ditch."

GAGE.--Two water-stage recorders with concrete controls for plants Nos. 1 and 2. Altitude of both gages are 690 ft (210 m), from topographic map.

REMARKS.--Records good. Discharge reported is total effluent from city of Riverside's Water Quality Control Plants Nos. 1 and 2, released to river 1.0 mi (1.6 km) downstream from Santa Ana River at MWD crossing (station 11066460).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 35 ft³/s (0.99 m³/s) Sept. 6-8, 11, 12, 1978; minimum daily, 16 ft³/s (0.45 m³/s) Feb. 11, 1978, due to temporary shutdown of Plant No. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	30	29	25	32	30	29	30	30	29	28	27
2	30	29	29	30	29	29	32	31	27	29	27	26
3	31	28	27	30	32	30	30	30	28	29	29	27
4	31	28	29	29	32	29	30	30	30	28	28	30
5	30	27	28	32	29	31	34	29	29	29	27	30
6	30	29	29	32	29	30	30	28	29	29	30	31
7	29	29	28	29	29	30	30	30	29	29	29	30
8	27	29	29	31	28	30	29	30	29	29	30	29
9	29	29	28	30	29	30	30	30	29	30	30	29
10	29	29	27	30	28	29	31	30	28	30	30	30
11	29	29	29	30	26	28	31	29	29	29	29	30
12	29	28	28	29	29	31	30	29	30	30	27	30
13	29	28	29	29	29	30	30	28	30	29	29	31
14	28	29	28	27	29	30	29	31	30	29	29	30
15	26	29	29	30	29	29	30	30	30	28	30	29
16	29	29	27	29	30	29	30	30	29	30	29	29
17	29	29	29	28	28	30	30	30	28	31	29	30
18	29	29	29	26	26	29	31	30	30	31	28	31
19	29	27	29	27	29	33	30	29	30	28	26	30
20	29	29	29	26	29	31	30	28	29	30	29	30
21	27	29	29	27	31	30	30	31	27	30	29	31
22	27	29	29	27	29	31	28	31	30	28	29	30
23	28	27	28	26	29	31	30	31	29	29	29	29
24	29	26	27	30	30	29	30	31	29	29	29	31
25	29	26	24	29	29	28	30	30	30	29	29	31
26	29	26	27	29	29	30	30	29	31	30	27	31
27	30	29	28	29	29	32	30	27	29	28	29	31
28	28	28	27	28	29	33	30	28	29	29	29	31
29	27	29	28	29	---	32	29	30	29	30	29	29
30	29	28	27	29	---	31	30	30	29	29	29	29
31	29	---	26	28	---	31	---	29	---	30	27	---
TOTAL	892	851	865	892	813	936	901	916	874	902	888	892
MEAN	28.8	28.4	27.9	28.8	29.0	30.2	30.0	29.5	29.1	29.1	28.6	29.7
MAX	31	30	29	32	32	33	34	31	31	31	30	31
MIN	26	26	24	25	26	28	28	27	27	26	26	26
AC-FT	1770	1690	1720	1770	1610	1860	1790	1820	1730	1790	1760	1770

CAL YR 1978 TOTAL 10404 MEAN 28.5 MAX 35 MIN 16 AC-FT 20640
WTR YR 1979 TOTAL 10622 MEAN 29.1 MAX 34 MIN 24 AC-FT 21070

11066480 RIVERSIDE WATER QUALITY CONTROL PLANT AT RIVERSIDE NARROWS, NEAR ARLINGTON, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to current year.
CHEMICAL ANALYSES: Water years 1970 to current year.
SPECIFIC CONDUCTANCE: Water years 1970 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1969 to current year.

INSTRUMENTATION.--Specific-conductance recorder since October 1969.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,780 micromhos Oct. 29, 1971; minimum recorded, 480 micromhos Apr. 25, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,310 micromhos June 14; minimum recorded, 850 micromhos Mar. 19.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
NOV					
01...	1420	30	1030	24.5	601
DEC					
04...	1200	28	985	20.5	613
JAN					
02...	1515	30	1050	17.0	619
08...	1235	31	1050	20.5	626
FEB					
05...	1340	29	1090	18.0	608
MAR					
02...	1400	29	1190	22.0	667
APR					
20...	1130	30	1145	22.0	669
MAY					
02...	1630	30	1190	22.0	665
30...	1500	30	1230	25.0	699
JUN					
12...	1145	30	1280	26.0	700
JUL					
06...	1415	29	1000	27.0	612
24...	1410	29	1130	28.0	683
AUG					
01...	1415	28	1210	23.0	703
23...	1200	29	1100	27.0	641
SEP					
06...	1235	31	1130	27.0	630

11066460 RIVERSIDE WATER QUALITY CONTROL PLANT AT RIVERSIDE NARROWS, NEAR ARLINGTON, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1050	984	1000	1130	990	1060	1120	1030	1070	1040	1000	1020
2	1060	936	987	1130	1050	1090	1090	1010	1050	1120	990	1050
3	1090	1010	1060	1130	1020	1070	1040	956	996	1140	1090	1110
4	1090	982	1040	1110	1020	1060	1120	972	1030	1140	1090	1120
5	1080	996	1040	1120	1030	1080	1160	1080	1120	1130	964	1090
6	1100	1040	1080	1150	1020	1070	1150	1040	1090	1040	872	950
7	1070	1000	1030	1130	1060	1100	1100	1030	1070	1100	1030	1070
8	1050	958	1010	1120	1040	1090	1090	1020	1060	1150	1030	1090
9	1100	954	1010	1120	1070	1100	1080	1030	1050	1170	1110	1130
10	1150	1030	1080	1120	1090	1110	1040	972	1000	1140	1090	1110
11	1120	1030	1080	1070	978	1020	1090	962	1000	1210	1090	1150
12	1100	1020	1060	1050	962	1000	1190	1080	1120	1180	1060	1110
13	1080	1040	1060	1110	994	1050	1230	1120	1180	1080	1050	1070
14	1060	996	1040	1100	1010	1050	1240	1140	1190	1040	976	996
15	1050	952	996	---	---	---	1230	1100	1150	1050	950	996
16	1070	942	1000	---	---	---	1170	1120	1150	1050	986	1020
17	1110	1020	1070	---	---	---	1100	1030	1070	1060	1010	1040
18	1120	1040	1070	---	---	---	1210	1020	1090	1070	1020	1040
19	1110	1050	1090	---	---	---	1170	1030	1100	1070	1000	1040
20	1120	1030	1080	---	---	---	1170	1130	1150	1070	960	1020
21	1110	1010	1060	---	---	---	1170	1100	1130	1000	922	955
22	1090	1000	1040	1100	1060	1080	1200	1090	1150	1060	918	983
23	1140	1020	1070	1110	964	1050	1080	1020	1050	1100	1010	1050
24	1150	1100	1140	1020	932	967	1050	986	1020	1100	1040	1070
25	1160	1090	1130	1060	1020	1040	1080	1020	1040	1090	1050	1070
26	1100	1050	1080	1100	1030	1060	1110	980	1030	1060	994	1030
27	1110	1040	1080	1130	982	1040	1100	1060	1080	1080	1000	1050
28	1050	978	1010	1160	1060	1120	1110	1070	1090	1010	942	969
29	1020	958	988	1190	1100	1130	1160	1100	1120	1030	912	963
30	1050	960	985	1170	1060	1110	1140	1050	1100	1050	988	1020
31	1120	1060	1080	---	---	---	1070	1020	1050	1070	958	1010
MONTH	1160	936	1050	---	---	---	1240	942	1080	1210	872	1050

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1060	962	992	1260	1200	1230	1110	1060	1090	1300	1130	1190
2	1070	996	1040	1230	1140	1180	1140	1060	1100	1130	1080	1110
3	1110	1030	1060	1160	1070	1120	---	---	---	1120	1050	1080
4	1070	1020	1040	1110	1030	1070	---	---	---	1230	1140	1190
5	1200	1010	1070	1190	1040	1120	---	---	---	1160	1070	1130
6	1200	1070	1120	1170	1110	1140	---	---	---	1100	1030	1060
7	1210	1100	1140	1170	1100	1140	1190	1100	1140	1110	982	1040
8	1200	1110	1160	1140	1050	1100	1100	970	1030	1100	1070	1080
9	1200	1130	1170	1110	1040	1080	1070	936	984	1170	1040	1090
10	1180	1100	1150	1090	1020	1060	1120	1040	1070	1170	1110	1130
11	1100	1060	1080	1050	966	1010	1100	988	1050	1140	1070	1100
12	1200	1020	1090	1120	1010	1060	1090	988	1030	1130	1050	1090
13	1190	1130	1170	1120	1050	1090	1050	990	1020	1070	1020	1050
14	1200	1080	1130	1110	1020	1060	1050	996	1020	1160	1010	1080
15	1210	1150	1180	1050	1000	1030	994	922	962	1220	1120	1160
16	1220	1130	1170	1050	1000	1020	1080	948	997	1230	1120	1160
17	1180	1090	1140	1030	972	1000	1080	990	1040	1220	1110	1170
18	1130	1040	1080	964	880	920	1220	1020	1110	1230	1100	1160
19	1150	1040	1090	1000	850	912	1220	1080	1150	1160	1070	1120
20	1200	1100	1140	1160	1010	1080	1210	1070	1150	1090	990	1050
21	1190	1010	1100	1190	1140	1160	1200	1050	1130	1140	940	1020
22	1170	1060	1110	1230	1160	1190	1060	1000	1040	1120	1060	1090
23	1210	1100	1150	1220	1160	1190	1240	1050	1140	1130	1030	1090
24	1210	1080	1160	1230	1140	1190	1260	1200	1240	1190	1090	1140
25	1070	1020	1050	1140	1040	1090	1230	1120	1160	1160	1080	1110
26	1210	1010	1090	1130	996	1060	1200	1120	1160	1110	1020	1060
27	1200	1090	1180	1120	1070	1100	1190	1110	1150	1050	972	999
28	1270	1110	1170	1160	1060	1090	1240	1090	1180	1010	936	975
29	---	---	---	1210	1110	1150	1190	1050	1110	1110	970	1030
30	---	---	---	1230	1180	1200	1240	1000	1070	1200	1100	1150
31	---	---	---	1180	1110	1140	---	---	---	1210	1070	1140
MONTH	1270	962	1120	1260	850	1100	1260	922	1090	1300	936	1100

11066480 RIVERSIDE WATER QUALITY CONTROL PLANT AT RIVERSIDE NARROWS, NEAR ARLINGTON, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1200	1150	1170	1070	992	1030	---	---	---	1150	1070	1110
2	1190	1100	1150	1150	1030	1080	---	---	---	1070	974	1010
3	1130	1050	1100	1120	1056	1090	---	---	---	1030	962	1000
4	1140	1000	1060	1120	1040	1090	---	---	---	1050	942	999
5	1150	1020	1100	1070	980	1030	---	---	---	1120	1050	1080
6	1180	1100	1140	1100	1000	1060	---	---	---	1140	1070	1110
7	1150	1080	1110	---	---	---	---	---	---	1120	1010	1060
8	1150	1070	1100	---	---	---	---	---	---	1080	1010	1040
9	1070	1030	1050	---	---	---	---	---	---	1050	982	1020
10	1060	990	1040	---	---	---	---	---	---	1100	930	1030
11	1130	992	1060	---	---	---	---	---	---	1160	1110	1140
12	1190	1090	1150	---	---	---	---	---	---	1180	1090	1150
13	1290	1190	1230	---	---	---	---	---	---	1170	1080	1140
14	1310	1200	1250	---	---	---	---	---	---	1150	1070	1110
15	1280	1140	1210	---	---	---	---	---	---	1170	1060	1110
16	1190	1110	1140	---	---	---	---	---	---	1080	992	1030
17	1140	980	1030	---	---	---	---	---	---	1110	950	1020
18	1110	922	1010	---	---	---	---	---	---	1150	1010	1080
19	1100	1050	1080	---	---	---	---	---	---	1170	1080	1130
20	1150	1030	1080	---	---	---	---	---	---	1160	1040	1090
21	1180	1110	1150	---	---	---	---	---	---	1170	1060	1100
22	1180	1070	1120	---	---	---	---	---	---	1140	986	1070
23	1140	1050	1100	---	---	---	---	---	---	1080	968	1010
24	---	---	---	---	---	---	1220	1080	1160	1090	920	980
25	---	---	---	1230	1100	1170	1110	1070	1090	1120	1010	1060
26	1090	1020	1070	1280	1200	1250	1080	990	1040	1100	984	1030
27	1100	1050	1090	1270	1020	1150	1110	966	1040	1100	994	1050
28	1150	1070	1110	1150	990	1100	1120	1050	1090	1120	1000	1050
29	---	---	---	1120	890	1030	1120	1030	1070	1060	980	1020
30	1100	1030	1070	1160	896	1040	1170	1090	1120	1010	912	973
31	---	---	---	1210	960	1100	1220	1120	1170	---	---	---
MONTH	1310	922	1110	---	---	---	---	---	---	1180	912	1060
YEAR	1310	850	1080									

11067890 SANTA ANA RIVER AT PRADO PARK, NEAR CORONA, CA

LOCATION.--Lat 33°55'42", long 117°35'44", in Jurupa Grant, Riverside County, Hydrologic Unit 18070203, in Prado Park on right bank 0.4 mi (0.6 km) upstream from Auburndale Bridge, and 4.1 mi (6.6 km) northwest of Corona.

DRAINAGE AREA.--1,010 mi² (2,616 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1971 to current year. Records May 1930 to November 1966 (irrigation seasons only), October 1966 to September 1968 at site 0.4 mi (0.6 km) downstream (at Auburndale Bridge, station 11068000), equivalent if diversion to Durkee ditch added.

GAGE.--Water-stage recorder. Altitude of gage is 560 ft (171 m), from topographic map.

REMARKS.--Records poor. Flow partly regulated by Big Bear Lake (station 11049000) 44 mi (71 km) upstream. Natural streamflow affected by ground-water withdrawals, diversions for irrigation, and return flows from irrigated areas. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--8 years, 91.5 ft³/s (2.591 m³/s), 66,290 acre-ft/yr (81.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 30,000 ft³/s (850 m³/s) Mar. 4, 1978, by flood routing, gage height, 9.82 ft (2.993 m); maximum gage height, 11.43 ft (3.484 m) Feb. 10, 1978, from backwater; minimum daily discharge, 10 ft³/s (0.28 m³/s) Aug. 7, Sept. 23, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft³/s (36.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 6	0615	*2,890	81.8	6.16	1.878
Mar. 28	1800	2,400	68.0	5.85	1.783

Minimum daily discharge, 22 ft³/s (0.62 m³/s) July 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	38	50	61	200	450	250	100	52	34	34	32
2	36	35	45	52	170	225	231	140	52	34	36	30
3	36	33	45	68	88	110	217	110	52	34	36	33
4	33	33	44	61	75	95	167	100	52	33	34	32
5	33	33	44	162	70	90	194	99	57	32	34	30
6	49	33	44	1150	68	85	180	87	57	32	34	42
7	57	33	44	169	66	62	204	96	56	32	39	42
8	50	33	43	110	65	68	180	170	52	32	32	40
9	40	33	43	78	64	61	200	250	49	32	38	34
10	49	35	41	64	63	50	176	170	49	44	36	36
11	50	40	41	78	62	52	169	132	47	40	41	40
12	45	50	40	83	62	53	172	105	47	38	41	40
13	52	44	40	62	67	72	222	93	45	36	28	36
14	43	34	40	75	93	57	245	88	42	44	30	36
15	43	68	40	164	80	68	213	100	38	28	32	36
16	47	66	40	161	75	66	206	117	36	32	30	35
17	36	44	146	79	76	167	213	113	34	34	34	34
18	35	62	265	85	68	196	257	110	34	36	34	34
19	35	72	388	64	66	643	388	100	32	32	32	34
20	35	64	95	59	64	320	534	96	32	36	32	34
21	36	67	95	78	760	350	270	98	34	32	36	34
22	37	96	83	84	608	291	158	88	32	22	32	34
23	36	70	72	73	363	285	135	78	34	27	27	34
24	36	72	64	72	140	249	120	84	36	27	28	34
25	36	62	61	61	125	231	111	84	36	28	28	34
26	37	68	55	61	110	240	110	88	34	35	28	34
27	38	64	49	74	115	753	105	82	34	38	30	34
28	38	52	95	74	120	1400	100	78	36	27	32	34
29	37	70	50	74	---	1100	100	66	34	32	32	34
30	40	58	64	76	---	465	100	56	34	36	32	34
31	40	---	62	415	---	297	---	54	---	34	32	---
TOTAL	1244	1561	2268	3972	4038	8675	5845	3238	1263	1018	1022	1055
MEAN	40.1	52.0	73.2	128	144	280	195	104	42.1	32.8	33.0	35.2
MAX	57	96	388	1150	760	1400	534	250	57	46	41	42
MIN	33	33	40	61	62	50	100	54	32	22	27	30
AC-FT	2470	3100	4500	7880	8010	17210	11590	6420	2510	2020	2030	2090

CAL YR 1978 TOTAL 110395 MEAN 302 MAX 12000 MIN 25 AC-FT 219000
WTR YR 1979 TOTAL 35199 MEAN 96.4 MAX 1400 MIN 22 AC-FT 69800

11067890 SANTA ANA RIVER AT PRADO PARK NEAR CORONA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1975 to current year.
SEDIMENT RECORDS: February 1976 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATION: Maximum daily mean, 23,500 mg/L Mar. 4, 1978; minimum daily mean, 20 mg/L July 15, 1976.
SEDIMENT DISCHARGE: Maximum daily, 842,000 tons (764,000 metric tons) Mar. 2, 1978; minimum daily, 1.2 tons (1.1 metric tons) July 15, 1976.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 12,600 mg/L Jan. 6; minimum daily mean, 51 mg/L July 21.
SEDIMENT DISCHARGE: Maximum daily, 49,300 tons (44,700 metric tons) Mar. 28; minimum daily, 3.6 tons (3.3 metric tons) July 22.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	6.5	15.0	20.5	19.0	---	---	---	23.0
2	22.0	---	---	12.0	10.5	15.0	21.0	21.5	---	21.0	30.0	---
3	---	---	---	---	14.0	20.0	23.0	18.0	---	26.0	---	23.0
4	---	---	---	12.0	13.0	19.0	20.0	19.5	21.0	---	---	---
5	---	20.0	---	13.0	8.0	24.0	22.0	19.0	---	---	24.0	21.0
6	20.5	---	7.5	12.5	---	23.5	---	20.0	---	---	---	---
7	---	---	---	---	16.0	24.0	21.0	23.0	19.0	---	---	---
8	---	---	---	14.5	16.0	24.0	22.0	---	---	---	26.0	---
9	---	---	---	15.0	18.0	---	20.0	19.0	---	---	---	32.0
10	---	---	---	15.0	14.0	---	21.0	19.0	---	26.0	---	31.0
11	---	16.5	---	17.0	14.0	23.0	20.5	---	32.0	25.0	23.0	---
12	---	13.5	---	16.0	14.5	24.0	28.0	---	---	---	---	---
13	---	---	---	15.0	18.5	21.0	25.0	25.0	---	---	---	29.0
14	20.0	---	---	14.0	20.0	24.0	27.0	27.0	33.0	26.0	26.0	---
15	---	---	---	12.0	10.0	---	27.0	---	---	---	---	29.0
16	24.0	---	---	19.5	12.0	21.5	19.0	19.0	---	---	25.0	---
17	---	---	---	15.0	13.0	20.0	21.0	21.0	---	30.0	---	31.0
18	26.0	---	---	15.0	12.5	16.5	21.0	---	26.0	---	---	---
19	---	---	---	14.0	---	13.0	17.0	---	---	25.0	27.0	---
20	20.5	---	9.0	---	17.5	15.5	15.0	---	20.0	---	---	---
21	---	---	---	15.0	13.0	13.0	---	22.0	---	26.0	29.0	19.0
22	---	---	---	15.0	15.0	14.0	---	---	29.0	---	---	---
23	26.0	---	---	---	13.0	16.5	25.0	30.0	32.0	---	---	---
24	---	---	---	---	---	---	23.0	---	---	---	---	---
25	24.0	---	---	16.0	---	---	25.0	19.0	33.0	25.0	---	29.0
26	---	---	---	16.0	12.5	22.0	23.0	---	---	---	26.0	---
27	---	---	11.0	---	19.0	---	---	---	---	20.0	---	23.0
28	---	---	---	13.0	19.5	---	26.0	---	31.0	---	---	---
29	---	---	15.0	13.0	---	14.5	26.0	23.0	---	29.0	22.0	---
30	17.0	---	---	---	---	12.5	30.0	---	31.0	---	---	---
31	---	---	---	9.0	---	---	---	19.0	---	---	---	---
MONTH	---	---	---	---	14.5	---	22.0	---	---	---	---	---

11067890 SANTA ANA RIVER AT PRADO PARK NEAR CORONA, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	34	230	21	38	950	97	50	595	80
2	34	223	20	35	800	76	45	530	64
3	34	250	23	33	700	62	45	530	64
4	33	300	27	33	650	58	44	530	63
5	33	350	31	33	630	56	44	530	63
6	49	420	56	33	600	53	44	567	67
7	57	400	62	33	550	49	44	550	65
8	50	380	51	33	540	48	43	520	60
9	40	360	39	33	520	46	43	490	57
10	49	350	46	35	500	47	41	460	51
11	50	340	46	40	1200	130	41	430	48
12	49	330	44	56	1590	239	40	400	43
13	52	320	45	44	500	59	40	370	40
14	43	317	37	34	220	20	40	340	37
15	43	350	41	68	930	171	40	320	35
16	42	440	50	66	900	160	40	300	32
17	36	497	48	44	500	59	146	2080	820
18	35	463	44	62	840	141	265	3910	2800
19	35	470	44	72	980	191	388	5540	5800
20	35	472	45	59	820	131	95	950	244
21	36	400	39	67	880	159	95	700	180
22	37	350	35	94	1340	340	83	650	146
23	36	337	33	70	950	180	72	640	124
24	36	400	39	72	980	191	64	620	107
25	36	457	44	62	840	141	61	600	99
26	37	450	45	68	930	171	55	570	85
27	38	450	46	64	870	150	49	542	72
28	38	450	46	52	640	90	55	500	74
29	37	550	55	70	950	180	50	500	68
30	40	1030	111	58	830	130	64	550	95
31	40	1070	116	---	---	---	42	550	62
TOTAL	1244	---	1429	1561	---	3625	2268	---	11645

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	61	580	96	280	4570	3450	450	2340	2840
2	52	600	84	170	3570	1640	220	3290	1950
3	68	620	114	80	2800	605	110	850	252
4	41	640	71	75	1100	223	95	670	172
5	162	1970	1250	70	720	136	90	520	126
6	1150	12600	47500	68	600	110	85	470	108
7	169	4800	2190	66	550	98	62	610	102
8	110	1380	410	65	590	104	68	930	171
9	70	880	166	64	830	143	61	800	132
10	64	750	130	63	720	122	50	600	81
11	79	600	128	62	600	100	52	450	63
12	63	600	102	62	500	84	53	380	54
13	62	610	102	62	920	154	72	490	95
14	75	1200	243	90	1200	292	57	720	111
15	164	2670	1180	80	820	177	68	850	156
16	161	3400	1480	75	900	182	66	930	166
17	79	1430	305	70	680	129	167	3340	2140
18	85	900	207	68	620	114	194	3600	2520
19	64	750	130	66	620	110	643	5910	12700
20	59	600	96	64	620	107	320	3400	2940
21	70	500	95	760	4250	8720	350	3600	3400
22	84	660	150	600	2830	4580	291	1600	1260
23	73	830	164	360	2710	2630	265	750	537
24	72	600	117	140	1400	529	240	750	486
25	61	550	91	125	730	246	231	750	468
26	61	560	92	110	550	163	240	800	518
27	74	600	120	115	410	127	753	5550	22600
28	74	650	130	120	400	130	1480	11500	49300
29	74	650	130	---	---	---	1100	6520	20600
30	76	640	131	---	---	---	445	3000	3600
31	415	4370	5870	---	---	---	297	2200	1760
TOTAL	3972	---	63874	4030	---	25205	8675	---	131408

11067890 SANTA ANA RIVER AT PRADO PARK NEAR CORONA, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	250	2400	1620	100	400	108	52	180	25
2	231	3000	1870	140	1630	616	52	190	27
3	217	2200	1290	110	1890	561	52	200	28
4	147	1300	516	100	690	186	52	208	29
5	154	980	407	99	620	166	57	200	31
6	180	1030	501	97	730	191	57	190	29
7	204	1280	705	96	540	140	54	182	27
8	188	1250	635	170	1080	496	52	150	21
9	200	1200	648	250	2330	1570	49	130	17
10	176	1750	832	170	3400	1560	49	100	13
11	169	1910	872	132	2380	848	47	95	12
12	172	1800	836	105	1350	383	47	100	13
13	222	1700	1020	93	600	151	45	150	18
14	245	1300	860	88	300	71	42	190	22
15	213	1700	978	100	300	81	38	280	29
16	204	1280	705	117	320	101	36	360	35
17	213	1610	926	113	250	76	34	300	28
18	257	980	680	116	220	69	34	250	23
19	368	3480	3460	108	210	61	32	200	17
20	534	4850	6990	94	200	51	32	155	13
21	270	3300	2410	90	190	46	34	200	18
22	150	1970	798	80	180	39	32	332	29
23	135	1280	467	78	210	44	34	138	13
24	120	1000	324	84	350	79	36	150	15
25	111	670	201	84	400	91	36	158	15
26	110	470	140	88	300	71	36	190	18
27	105	400	113	82	150	33	36	230	22
28	100	380	103	78	70	15	36	260	25
29	100	540	146	66	55	9.8	36	250	24
30	100	280	76	54	90	13	34	232	21
31	---	---	---	54	170	25	---	---	---
TOTAL	5845	---	31129	3236	---	7951.8	1263	---	657

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	34	200	18	34	140	13	32	168	15
2	34	170	16	36	155	15	30	220	18
3	34	156	14	36	120	12	30	280	23
4	33	160	14	34	100	9.2	32	200	17
5	32	180	16	34	99	9.1	38	120	12
6	32	200	17	34	100	9.2	42	269	31
7	32	220	19	39	120	13	42	200	23
8	32	240	21	32	128	11	40	188	20
9	32	250	22	38	110	11	34	160	15
10	44	269	32	34	95	8.7	36	120	12
11	40	172	19	41	83	9.2	40	110	12
12	38	170	17	41	100	11	40	100	11
13	36	150	15	28	120	9.1	36	90	8.7
14	44	136	16	30	142	12	36	100	9.7
15	28	140	11	32	100	8.6	36	110	11
16	32	140	12	30	75	6.1	35	130	12
17	38	144	15	34	100	9.2	34	149	14
18	30	100	8.1	34	120	11	34	140	13
19	32	66	5.7	32	137	12	34	140	13
20	36	60	5.8	32	140	12	34	140	13
21	32	51	4.4	34	152	14	34	135	12
22	22	60	3.6	32	160	14	34	150	14
23	27	70	5.1	27	180	13	34	200	18
24	27	80	5.8	28	200	15	34	240	22
25	28	87	6.6	28	220	17	34	281	26
26	30	100	8.1	28	248	19	34	200	18
27	30	111	9.0	30	256	21	34	170	16
28	27	110	8.0	32	270	23	34	157	14
29	32	104	9.0	32	288	25	34	150	14
30	36	110	11	32	250	22	34	150	14
31	34	120	11	32	200	17	---	---	---
TOTAL	1018	---	395.2	1022	---	411.4	1055	---	471.4
YEAR	35189.0		277401.0						

11067890 SANTA ANA RIVER AT PRADO PARK NEAR CORONA, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPER-ATURE, WATER (DEG C)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
NOV							
12...	1320	10.0	--	1500	--	28	36
JAN							
06...	0830	9.5	1580	19300	82300	33	45
06...	1500	12.5	624	11200	18900	36	55
25...	1315	14.0	60	513	83	--	--
MAR							
19...	1500	15.0	768	4960	10300	17	22

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
NOV							
12...	39	44	52	76	98	100	--
JAN							
06...	59	70	81	91	99	100	--
06...	59	68	76	87	98	100	--
25...	--	--	29	60	95	99	100
MAR							
19...	37	43	57	74	91	98	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	NUMBER OF SAM-PLING POINTS	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM
OCT								
17...	1000	4	1	9	53	89	98	100
SEP								
28...	1105	5	--	5	36	79	96	100

11069000 LAKE HEMET NEAR IDYLLWILD, CA

LOCATION.--Lat 33°39'56", long 116°42'19", in SE¼SW¼NE¼ sec.7, T.6 S., R.3 E., Riverside County, Hydrologic Unit 18070202, on upstream face near right end of dam on South Fork San Jacinto River, 5 mi (8 km) southeast of Idyllwild, and 6.5 mi (10.5 km) upstream from mouth.

DRAINAGE AREA.--65.6 mi^2 (169.9 km^2).

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Nonrecording gage read once daily. Datum of gage is 4,201.5 ft (1,280.617 m) National Geodetic Vertical Datum of 1929 (levels by Lake Hemet Municipal Water District).

REMARKS.--Lake is formed by single-arch dam. Dam was completed to a height of 110 ft (33.5 m) in 1893; raised to 122.5 ft (37.34 m) in 1895, and to 135 ft (41.1 m) in 1923. Capacity table is dated February 1932 (furnished by Lake Hemet Municipal Water District). Capacity below spillway level, elevation, 4,333.0 ft (1,320.70 m), 11,882 acre-ft (14.7 hm^3). Water is released from lake to South Fork San Jacinto River for domestic use and irrigation in the Hemet-San Jacinto Valley. See schematic diagram of Santa Ana River basin.

COOPERATION.--Elevations and contents were furnished by Lake Hemet Municipal Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 14,050 acre-ft (17.3 hm^3) Mar. 9, 1978, elevation, 4,338.0 ft (1,322.22 m), from capacity table extended above 4,336.5 (1,321.77 m); minimum observed, 264 acre-ft (326 m^3) Nov. 19, 1962, Nov. 19, 1963, elevation, 4,266.9 ft (1,300.55 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 13,540 acre-ft (16.7 hm^3) Feb. 28, elevation, 4,336.8 ft (1,321.86 m), from capacity table extended above 4,336.5 ft (1,321.77 m); minimum observed, 11,640 acre-ft (14.4 hm^3) Oct. 15, elevation, 4,332.4 ft (1,320.52 m).

MONTHEND ELEVATION, NGVD, AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	4,332.90	11,840	--
Oct. 31	4,332.70	11,770	-70
Nov. 30	4,332.70	11,770	0
Dec. 31	4,333.70	12,190	+420
CAL YR 1978	--	--	+7,160
Jan. 31	4,335.60	13,010	+820
Feb. 28	4,336.80	13,540*	+530
Mar. 31	4,336.80	13,540*	0*
Apr. 30	4,336.80	13,540*	0*
May 31	4,336.80	13,540*	0*
June 30	4,336.70	13,500	-40
July 31	4,336.40	13,370	-130
Aug. 31	4,335.20	12,850	-520
Sept. 30	4,334.10	12,360	-490
WTR YR 1979	--	--	+520

*Lake is spilling.

11069500 SAN JACINTO RIVER NEAR SAN JACINTO, CA

LOCATION.--Lat 33°44'10", long 116°49'26", in NE¼NE¼SE¼ sec.13, T.5 S., R.1 E., Riverside County, Hydrologic Unit 18070202, on right bank 350 ft (107 m) upstream from bridge on State Highway 74, 1 mi (2 km) downstream from North Fork, 8.3 mi (13.4 km) southeast of San Jacinto, and 9 mi (14 km) downstream from Lake Hemet.

DRAINAGE AREA.--141 mi² (365 km²).

PERIOD OF RECORD.--October 1920 to February 1927, March 1927 to current year. Records since Oct. 1, 1969, equivalent to prior records if lower diversion is deducted from flow past station. Combined records of river and diversion, October 1948 to current year. Monthly discharge only for October 1920 and July to September 1926, published in WSP 1315-B.

GAGE.--Water-stage recorder on river; water-stage recorder on upper canal. Datum of river gage is 1,982.75 ft (604.342 m) Corps of Engineers datum. See WSP 1735 for history of changes prior to Jan. 23, 1948. Prior to Oct. 1, 1969, at site 350 ft (107 m) downstream at same datum. Canal gage at different datum.

REMARKS.--Records fair. Flow partly regulated by Lake Hemet (station 11069000). Lake Hemet Municipal Water District's upper canal diverts 4.0 mi (6.4 km) above station. One small diversion for domestic use above station. Diversion above station began prior to 1920. Since relocation of station above lower diversion on Oct. 1, 1969, the records of lower diversion are available at Lake Hemet Municipal Water District. See schematic diagram of Santa Ana River basin. Combined records are equivalent for period of record. For records of combined daily discharge of San Jacinto River and diversion, see following page. Gage height of Mar. 28 peak from auxiliary gage at old site 350 ft (107 m) downstream.

AVERAGE DISCHARGE.--River only: 48 years (water years 1921-26, 1928-69), 18.0 ft³/s (0.510 m³/s), 13,040 acre-ft/yr (16.1 hm³/yr); 10 years (water years 1970-79), 16.3 ft³/s (0.462 m³/s), 11,810 acre-ft/yr (14.6 hm³/yr).

Combined river and diversion: 31 years (water years 1949-79), 20.2 ft³/s (0.572 m³/s), 14,630 acre-ft/yr (18.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 45,000 ft³/s (1,270 m³/s) Feb. 16, 1927, on basis of slope-area measurement of maximum flow; no flow for several months in some years.

Combined river and diversion: Maximum discharge, 7,420 ft³/s (210 m³/s) Jan. 25, 1969; no flow at times in 1951, 1952, 1957, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14.2 m³/s) revised, and maximum (*), from rating curve extended above 729 ft³/s (20.6 m³/s):

Date	Time	River Discharge (ft³/s)	River Discharge (m³/s)	Gage height (ft)	Gage height (m)	Combined River and Diversion Discharge (ft³/s)	Combined River and Diversion Discharge (m³/s)
Feb. 14	2030	614	17.4	11.88	3.621	614	17.4
Feb. 21	2000	*2,050	58.1	13.00	3.962	*2,050	58.1
Mar. 28	0500	1,600	45.3	†8.83	2.691	1,600	45.3

† From auxiliary gage.

River only: Minimum daily discharge, 1.4 ft³/s (0.040 m³/s) Nov. 10, July 16.
Combined river and diversion: Minimum daily discharge, 4.7 ft³/s (0.13 m³/s) Oct. 16, Dec. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	6.5	3.6	14	40	188	350	114	65	12	5.9	7.5
2	5.7	6.7	20	12	39	186	318	116	60	11	5.7	7.2
3	5.7	6.3	13	10	33	152	280	114	57	11	5.7	7.3
4	5.7	6.2	8.6	10	30	143	253	111	53	10	5.3	6.7
5	5.9	6.3	6.1	16	30	142	235	108	55	10	5.4	6.7
6	6.0	5.7	5.1	76	29	147	220	104	55	9.8	6.3	6.7
7	6.0	4.4	4.4	69	34	121	204	102	57	9.4	7.7	6.8
8	5.9	2.8	3.8	46	42	130	192	101	57	8.9	8.6	7.1
9	5.9	1.6	3.6	35	47	135	180	97	60	8.5	6.0	7.2
10	5.9	1.4	3.5	28	54	129	172	89	52	8.3	5.5	7.4
11	5.9	4.4	3.5	24	64	125	165	84	42	8.0	5.5	7.1
12	5.7	5.4	3.7	34	68	121	158	91	36	7.9	7.4	7.2
13	5.6	4.1	4.1	37	49	118	150	90	34	3.1	8.8	7.7
14	5.3	4.4	5.5	26	183	117	146	85	33	3.0	9.8	7.5
15	5.1	3.6	9.4	44	264	116	141	86	31	1.9	8.2	7.5
16	4.7	3.4	15	46	159	118	136	80	30	1.4	26	7.0
17	4.9	3.3	70	47	112	120	130	89	30	10	20	6.9
18	4.9	3.1	104	50	132	125	127	74	29	18	20	6.8
19	4.9	2.6	58	42	118	142	123	74	26	12	30	6.6
20	11	2.5	34	37	111	180	119	72	23	58	19	7.1
21	11	2.4	27	34	759	165	116	74	20	67	15	7.0
22	8.7	13	24	31	670	154	113	72	19	28	9.3	7.3
23	7.9	12	21	28	327	148	111	70	19	21	6.1	6.9
24	7.5	11	19	27	235	144	112	69	16	15	5.4	6.8
25	6.5	14	18	27	183	146	116	70	15	11	6.5	6.9
26	6.0	12	17	24	190	160	122	70	14	7.0	6.9	7.2
27	5.9	10	17	21	140	345	128	74	14	6.5	6.6	7.0
28	6.8	8.6	16	22	147	1270	125	72	13	6.2	6.8	6.8
29	6.2	7.2	16	21	---	699	122	67	13	6.0	7.7	6.5
30	6.2	5.1	16	19	---	482	122	65	12	5.8	8.3	6.3
31	6.5	---	15	29	---	410	---	65	---	6.1	7.6	---
TOTAL	195.5	180.0	584.9	986	4289	6878	4986	2649	1040	401.8	303.0	210.7
MEAN	6.31	6.00	18.9	31.8	153	222	166	85.5	34.7	13.0	9.77	7.02
MAX	11	14	104	76	759	1270	350	116	65	67	30	7.7
MIN	4.7	1.4	3.5	10	29	116	111	65	12	1.4	5.3	6.3
AC-FT	388	357	1160	1960	8510	13640	9890	5250	2060	797	601	418

CAL YR 1978 TOTAL 24561.1 MEAN 67.3 MAX 2210 MIN 1.4 AC-FT 48720
WTR YR 1979 TOTAL 22703.9 MEAN 62.2 MAX 1270 MIN 1.4 AC-FT 45030

11069500 SAN JACINTO RIVER NEAR SAN JACINTO, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF SAN JACINTO RIVER AND LAKE HEMET WATER CO.'S UPPER CANAL, NEAR SAN JACINTO, CA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	6.5	4.7	14	42	190	356	115	68	18	9.2	9.1
2	5.7	6.7	22	12	40	188	324	117	63	17	8.8	8.7
3	5.7	5.3	15	10	34	153	286	114	60	15	8.6	8.8
4	5.7	6.2	11	10	31	144	259	111	55	10	8.1	8.1
5	5.9	6.3	4.5	16	31	142	241	108	56	11	8.2	8.0
6	6.0	5.9	7.3	76	30	147	226	104	55	14	9.6	7.6
7	6.0	5.7	6.1	69	35	122	210	102	57	15	11	7.9
8	5.9	5.9	5.1	46	43	131	198	103	57	15	13	8.2
9	5.9	6.0	5.1	35	48	137	186	102	60	14	9.2	8.3
10	5.9	6.1	5.0	28	55	131	178	95	52	14	8.3	8.4
11	5.9	12	4.9	24	65	126	171	88	44	14	8.2	8.0
12	5.7	13	5.2	34	69	121	164	96	42	14	11	8.1
13	5.6	9.9	5.6	37	51	118	156	96	40	8.9	13	8.6
14	5.3	10	6.9	26	185	117	152	89	38	9.5	13	8.6
15	5.1	8.9	11	44	265	116	147	86	36	8.0	11	8.6
16	4.7	8.5	16	46	159	118	142	84	35	7.1	28	7.9
17	4.9	8.2	71	47	112	120	136	94	35	15	22	7.7
18	4.9	6.6	104	50	132	125	133	79	34	24	21	7.6
19	4.9	5.7	59	42	118	142	129	79	32	17	30	7.3
20	11	5.5	34	37	111	180	125	77	29	62	19	7.8
21	12	5.8	27	34	759	165	122	79	26	70	15	7.7
22	8.7	17	24	31	470	154	119	77	25	31	11	8.0
23	7.9	14	21	28	327	148	117	74	27	24	8.7	7.6
24	7.5	13	19	27	235	144	118	73	25	19	7.8	7.5
25	6.5	16	18	27	183	146	122	73	24	14	8.7	7.6
26	6.0	13	17	24	192	160	128	72	24	9.3	9.0	7.9
27	5.9	10	17	21	143	347	134	74	23	8.5	8.6	7.7
28	6.8	8.6	16	22	149	1280	130	72	22	7.8	8.6	7.5
29	6.2	7.3	16	21	---	705	126	69	20	7.4	9.4	7.2
30	6.2	5.6	16	20	---	488	124	68	18	6.9	9.9	7.0
31	6.5	---	15	32	---	416	---	68	---	8.0	9.3	---
TOTAL	196.5	260.2	612.4	990	4314	6921	5159	2738	1182	528.4	376.2	234.0
MEAN	6.34	8.67	19.8	31.9	154	223	172	88.3	39.4	17.0	12.1	7.97
MAX	12	17	104	76	759	1280	356	117	68	70	30	9.1
MIN	4.7	5.5	4.7	10	30	116	117	68	18	6.9	7.8	7.0
AC-FT	390	516	1210	1960	8560	13730	10230	5430	2340	1050	746	474

CAL YR 1978 TOTAL 25217.3 MEAN 69.1 MAX 2210 MIN 4.7 AC-FT 50020
WTR YR 1979 TOTAL 23516.7 MEAN 64.4 MAX 1280 MIN 4.7 AC-FT 46650

11070050 BAUTISTA CREEK AT VALLE VISTA, CA

LOCATION.--Lat 33°44'04", long 116°53'33", in SE¼NE¼SE¼ sec.17, T.5 S., R.1 E., Riverside County, Hydrologic Unit 18070202, on left levee of flood channel, 1.0 mi (1.6 km) south of Valle Vista.

DRAINAGE AREA.--47.2 mi² (122.2 km²).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,835 ft (559 m), from topographic map.

REMARKS.--Records poor. No regulation above station. Diversion above station for irrigation of about 15 acres (61,000 mi²). Some infiltration by detention dam, 1.5 mi (2.4 km) upstream.

AVERAGE DISCHARGE.--10 years, 1.45 ft³/s (0.041 m³/s), 1,050 acre-ft/yr (1.29 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,390 ft³/s (39.4 m³/s) Mar. 28, 1979, gage height, 3.30 ft (1.006 m), from rating curve extended above 80 ft³/s (2.27 m³/s) on basis of computation of flow in concrete-lined channel at gage heights 1.50 ft (0.457 m), 2.00 ft (0.610 m), and 3.00 ft (0.914 m); no flow for many days in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,390 ft³/s (39.4 m³/s) Mar. 28 (1215 hrs), gage height, 3.30 ft (1.006 m), no other peak above base of 100 ft³/s (2.83 m³/s); no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	.14	.17	.06	.06	0	0	0	
2	0	0	0	0	.07	.05	.07	.04	.05	0	0	
3	0	0	0	0	.06	0	.11	.02	.07	.04	0	
4	0	0	0	0	.06	0	.07	.06	.06	.06	0	
5	0	0	0	0	.06	0	.06	.06	.06	.06	0	
6	0	0	0	0	.06	0	.06	.09	.06	.06	0	
7	0	0	0	0	.06	0	.06	.06	.06	.03	0	
8	0	0	0	0	.05	0	.06	.05	.06	0	0	
9	0	0	0	0	0	0	.06	.06	.06	0	0	
10	0	0	0	0	0	0	.08	.09	.06	0	0	
11	0	.29	0	0	0	0	.10	.11	.03	0	0	
12	0	0	0	0	0	0	.10	.09	0	0	0	
13	0	0	0	0	0	.01	.06	.09	0	0	.05	
14	0	0	0	.07	0	0	.11	.04	0	0	.03	
15	0	0	0	.14	0	0	.08	0	0	0	0	
16	0	0	0	0	0	0	.08	.04	0	0	.04	
17	0	0	.03	0	0	.01	.10	.05	0	0	.13	
18	0	0	0	.01	0	0	.06	.06	0	0	.08	
19	0	0	0	0	0	.13	.07	.06	0	0	.02	
20	.02	0	0	0	0	0	.06	.07	0	0	.02	
21	0	0	0	0	.44	0	.09	.06	0	0	0	
22	0	0	0	0	.45	0	.07	.06	0	.14	0	
23	0	0	0	0	.06	0	.07	.06	0	.04	0	
24	0	.02	0	0	.05	0	1.9	.06	0	.02	0	
25	0	0	0	0	0	0	.16	.06	0	0	0	
26	0	0	0	0	0	0	.06	.06	0	0	0	
27	0	0	0	0	0	.15	.06	.06	0	0	0	
28	0	0	0	.04	0	141	.11	.09	0	0	0	
29	0	0	0	.06	---	8.8	.08	.14	0	0	0	
30	0	0	0	.02	---	.06	.06	.14	0	0	0	
31	0	---	0	1.3	---	.06	---	.11	---	0	0	---
TOTAL	.02	.31	.03	1.64	1.56	150.44	4.17	2.11	.57	.45	.37	0
MEAN	.0006	.010	.001	.053	.056	4.85	.14	.068	.019	.015	.012	0
MAX	.02	.29	.03	1.3	.45	141	1.9	.14	.07	.14	.13	0
MIN	0	0	0	0	0	0	.06	0	0	0	0	0
AC-FT	.04	.6	.06	3.3	3.1	298	8.3	4.2	1.1	.9	.7	0

CAL YR 1978 TOTAL 3706.55 MEAN 10.2 MAX 181 MIN 0 AC-FT 7350
WTR YR 1979 TOTAL 161.67 MEAN .44 MAX 141 MIN 0 AC-FT 321

11070375 SAN JACINTO RIVER AT RAILROAD CANYON WEIR, NEAR ELSINORE, CA

LOCATION.--Lat 33°44'10", long 117°15'08", in SW¼SE¼NW¼ sec.13, T.5 S., R.4 W., Riverside County, Hydrologic Unit 18070202, on right bank 4.3 mi (6.9 km) northeast of Railroad Canyon Dam, and 5.8 mi (9.3 km) northeast of Elsinore.

DRAINAGE AREA.--562 mi² (1,456 km²).

PERIOD OF RECORD.--October 1951 to current year. Monthly discharge only prior to October 1971. Daily discharge available in district files.

GAGE.--Water-stage recorder. Altitude of gage is 1,400 ft (427 m), from topographic map. Prior to Sept. 28, 1960, at site 0.8 mi (1.3 km) upstream at different datum.

REMARKS.--Flow partially regulated by Lake Hemet (station 11069000). Diversions for irrigation and domestic use above station. At times imported Colorado River water is discharged into channel above station by Temescal Water Co. or Elsinore Valley Municipal Water District.

COOPERATION.--Records were published as furnished by Riverside County Flood Control and Water Conservation District.

AVERAGE DISCHARGE.--River only: 28 years, 8.37 ft³/s (0.237 m³/s), 6,060 acre-ft/yr (7.47 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,330 ft³/s (151 m³/s) Feb. 25, 1969, results of runoff study by Riverside County Flood Control and Water Conservation District; no flow for long periods in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,960 ft³/s (50.1 m³/s) Jan. 6, gage height, 4.60 ft (1.405 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.10	.43	271	16	155	16	0			0
2		0	.45	0	88	44	129	16	0			0
3		0	.54	0	111	23	111	16	0			0
4		0	.56	.10	47	26	106	16	0			0
5		0	.71	92	36	29	102	15	0			0
6		0	.87	1090	22	28	98	14	7.9			0
7		0	.89	81	16	41	95	14	3.6			0
8		0	.89	28	11	14	92	13	1.4			0
9		0	.89	16	8.3	12	91	13	.63			0
10		0	.89	11	7.3	11	98	12	.09			0
11		0	.89	8.6	6.7	11	98	12	0			0
12		.74	.89	6.0	8.2	11	82	11	0			0
13		2.9	.89	3.8	19	11	67	9.8	0			0
14		1.2	.89	2.8	18	12	58	9.2	0			0
15		1.4	32	2.5	3.6	13	54	7.3	0			0
16		.82	42	2.7	2.0	19	52	4.9	0			0
17		.59	29	3.4	1.8	42	52	2.9	0			0
18		.56	35	11	1.7	37	60	1.8	0			0
19		.56	24	9.3	1.6	97	58	1.4	0			0
20		.56	7.3	2.9	1.6	86	51	1.2	0			21
21		.59	.60	1.5	13	94	46	1.1	0			66
22		4.6	72	.95	17	52	41	.99	0			69
23		1.6	78	1.0	12	51	37	.72	0			70
24		.90	78	1.1	15	53	34	.54	0			70
25		.77	69	1.0	15	54	30	.45	0			70
26		.58	68	.90	21	51	26	.27	0			70
27		.41	67	.90	22	48	23	.18	0			70
28		.27	58	.90	21	109	20	.18	0			70
29		0	10	.90	---	112	19	.18	0			70
30		0	2.0	.90	---	152	18	.18	0			70
31		---	1.0	493	---	178	---	.18	---			---
TOTAL	0	18.80	680.41	1874.66	807.8	1537	1987	211.47	13.62	0	0	716
MEAN	0	.63	21.9	60.5	28.9	49.6	66.2	6.82	.45	0	0	23.9
MAX	0	4.6	72	1090	271	178	155	16	7.9	0	0	70
MIN	0	0	.10	0	1.6	11	18	.18	0	0	0	0
AC-FT	0	37	1350	3720	1600	3050	3940	419	27	0	0	1420
a	0	0	1820	0.00	0	0	0	0	0	0	0	1420

CAL YR 1978 TOTAL 25744.28 MEAN 70.5 MAX 2200 MIN 0 AC-FT 51060 AC-FT a 3650
WTR YR 1979 TOTAL 7846.76 MEAN 21.5 MAX 1090 MIN 0 AC-FT 15560 AC-FT a 3240

a Imported Colorado River water, in acre-ft.

11070500 SAN JACINTO RIVER NEAR ELSINORE, CA

LOCATION.--Lat 33°39'51", long 117°17'35", in SE¼SE¼NE¼ sec.9, T.6 S., R.4 W., Riverside County, Hydrologic Unit 18070203, on right bank 2 mi (3 km) east of Elsinore, 2.1 mi (3.4 km) downstream from Railroad Canyon Dam, and 36 mi (58 km) downstream from Lake Hemet.

DRAINAGE AREA.--723 mi² (1,873 km²).

PERIOD OF RECORD.--January 1916 to current year. Monthly figures 1927-50, adjusted for diversion, published in WSP 1315-B.

GAGE.--Water-stage recorder. Altitude of gage is 1,270 ft (387 m), from topographic map. Prior to Feb. 13, 1916, nonrecording gage at site 0.7 mi (1.1 km) downstream at different datum. Feb. 13, 1916, to Oct. 27, 1921, nonrecording gage at present site at different datum.

REMARKS.--Records good. Flow partly regulated by Lake Hemet (station 11069000) and regulated since 1928 by Railroad Canyon Reservoir, capacity, 12,000 acre-ft (14.8 hm³), 2.1 mi (3.4 km) above station. Diversion for irrigation and domestic use above Railroad Canyon Reservoir. Temescal Water Co. diverted 53.5 acre-ft (65,970 m³) during current year from Railroad Canyon Reservoir for irrigation below station in vicinity of Corona. See schematic diagram of Santa Ana River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft³/s (453 m³/s) Feb. 17, 1927, gage height, 11.8 ft (3.60 m), from rating curve extended above 2,000 ft³/s (56.6 m³/s) on basis of slope-area measurement of maximum flow; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,680 ft³/s (75.9 m³/s) Jan. 7, gage height, 7.32 ft (2.231 m); minimum daily, 0.32 ft³/s (0.009 m³/s) Sept. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	.40	.67	2.0	960	42	193	16	2.6	.71	.62	.55
2	.48	.44	.67	2.0	352	61	163	17	2.5	.96	.60	.45
3	.51	.44	.67	2.0	245	53	139	18	2.7	1.1	.67	.44
4	.48	.37	.71	1.2	138	44	123	17	2.4	1.0	.33	.44
5	.48	.37	.67	1.4	88	43	116	16	2.1	1.2	.34	.45
6	.51	.37	.71	296	63	41	111	14	2.1	1.2	.65	.43
7	.48	.37	.75	1700	47	46	106	11	2.2	1.2	.60	.44
8	.48	.37	.79	431	37	46	106	9.9	2.0	1.4	.47	.46
9	.44	.44	.79	229	36	32	101	9.7	1.8	1.4	.56	.45
10	.44	.40	.79	121	37	28	100	8.8	1.5	1.2	.64	.41
11	.44	.51	.79	57	32	27	99	7.8	1.4	1.0	.83	.39
12	.48	.55	.79	36	29	26	99	7.6	1.3	1.0	.91	.43
13	.41	.55	.79	29	28	26	99	6.6	1.3	1.2	.86	.43
14	.48	.59	.79	19	60	32	77	6.1	1.1	1.1	.86	.43
15	.51	.51	.79	13	30	31	68	5.4	1.0	1.3	.75	.42
16	.51	.51	.79	20	23	32	64	4.7	1.1	1.3	.77	.36
17	.51	.51	2.6	33	29	55	60	4.0	1.1	1.3	.61	.32
18	.48	.55	5.8	33	18	75	64	3.4	1.4	1.3	.63	.33
19	.44	.55	6.0	36	17	100	70	3.2	.90	1.2	.65	.36
20	.41	.59	5.4	25	17	191	63	3.1	.76	1.6	.70	.37
21	.44	.63	5.8	16	23	104	50	2.9	.73	1.6	.69	.40
22	.44	.63	5.7	13	35	116	51	2.6	.69	1.2	.55	.39
23	.41	.59	5.4	12	60	86	43	2.5	.69	.90	.48	.36
24	.41	.67	5.0	11	51	79	37	2.6	.70	.83	.37	.35
25	.44	.63	5.0	9.2	42	79	32	2.5	.90	.64	.38	.37
26	.44	.63	4.5	9.5	37	77	28	2.5	.79	.61	.40	.35
27	.44	.67	4.0	7.9	38	84	25	2.8	.80	.63	.42	.33
28	.48	.63	3.5	8.9	36	117	23	2.8	.56	.67	.49	.40
29	.44	.67	3.0	8.7	---	199	21	2.8	.50	.60	.50	.40
30	.44	.63	2.5	8.6	---	198	18	2.6	.46	.70	.50	.40
31	.44	---	2.2	797	---	212	---	2.6	---	.82	.54	---
TOTAL	14.15	15.89	78.16	3933.4	2587	2436	2348	218.5	39.82	32.13	17.77	12.00
MEAN	.46	.53	2.52	127	92.4	78.5	78.3	7.05	1.33	1.04	.57	.40
MAX	.51	.67	6.0	1700	960	212	193	18	2.6	1.6	.91	.55
MIN	.41	.37	.67	1.2	17	26	18	2.5	.46	.63	.33	.32
AC-FT	28	32	155	7800	5130	4830	4660	433	79	64	35	24

CAL YR 1978 TOTAL 26868.61 MEAN 73.6 MAX 3080 MIN 0 AC-FT 53290
WTR YR 1979 TOTAL 11730.91 MEAN 32.1 MAX 1700 MIN .32 AC-FT 23270

11072000 TEMESCAL CREEK NEAR CORONA, CA

LOCATION.--Lat 33°50'29", long 117°30'37", in El Sobrante de San Jacinto Grant, Riverside County, Hydrologic Unit 18070203, on left bank 0.2 mi (0.3 km) downstream from unnamed tributary, and 3.8 mi (6.1 km) southeast of Corona.

DRAINAGE AREA.--164 mi² (425 km²), excludes 768 mi² (1,989 km²) above Lake Elsinore.

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for the period October 1928 to January 1929, published in WSP 1315-B.

GAGE.--Water-stage recorder. Concrete control since June 12, 1970. Altitude of gage is 730 ft (223 m), from topographic map. Prior to Feb. 11, 1943, at datum 6.00 ft (1.829 m) higher.

REMARKS.--Records poor. Flow regulated by several storage reservoirs. Many diversions above station for irrigation. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--52 years, 3.78 ft³/s (0.107 m³/s), 2,740 acre-ft/yr (3.38 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,900 ft³/s (422 m³/s) Mar. 2, 1938, on basis of slope-area measurement of maximum flow; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 290 ft³/s (8.21 m³/s) Jan. 31, gage height unknown; minimum daily, 1.0 ft³/s (0.028 m³/s) Aug. 27-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	5.7	4.0	12	170	35	45	16	8.2	4.1	3.5	1.1
2	2.0	5.3	4.3	12	185	29	42	16	8.2	4.1	3.3	1.1
3	2.0	4.9	3.6	11	130	29	37	13	8.0	4.0	3.1	1.1
4	2.0	4.9	3.6	12	75	28	35	13	7.9	4.0	2.9	1.1
5	2.0	4.9	3.4	32	57	29	33	13	7.7	4.0	2.7	1.1
6	2.0	4.6	2.6	90	52	26	32	13	7.6	3.9	2.6	1.1
7	2.0	5.3	1.8	40	47	25	30	13	7.4	3.9	2.4	1.2
8	2.0	5.3	1.4	15	43	27	29	13	7.3	3.9	2.3	1.2
9	2.0	5.7	1.4	11	39	27	28	13	7.1	3.9	2.1	1.2
10	1.8	7.3	2.3	10	35	26	27	13	6.9	3.8	2.0	1.2
11	1.8	22	2.0	9.7	32	28	26	12	6.7	3.8	1.9	1.2
12	2.1	19	3.4	9.3	28	29	24	11	6.6	3.8	1.9	1.2
13	2.1	11	2.6	9.1	25	30	23	10	6.4	3.8	1.8	1.3
14	2.1	12	2.0	9.0	27	34	22	9.9	6.3	3.8	1.8	1.3
15	2.1	10	2.9	10	28	34	21	9.6	6.1	3.8	1.7	1.3
16	2.8	8.2	3.1	12	26	34	21	9.5	6.0	3.7	1.6	1.3
17	2.5	7.0	9.5	11	24	38	20	9.4	5.8	3.7	1.6	1.3
18	2.3	5.6	11	12	22	41	19	9.3	5.7	3.7	1.5	1.4
19	2.8	4.5	16	13	22	50	19	9.2	5.6	3.7	1.5	1.4
20	3.1	3.9	12	11	23	52	18	9.1	5.4	3.7	1.4	1.4
21	4.3	3.4	16	10	65	50	18	9.0	5.3	3.6	1.4	1.4
22	4.9	5.3	13	9.2	51	45	17	8.9	5.2	3.6	1.3	1.4
23	5.7	5.3	12	8.4	51	40	17	8.9	5.0	3.6	1.2	1.5
24	6.8	4.9	12	7.7	46	37	16	8.8	4.8	3.6	1.2	1.5
25	9.0	5.3	11	7.3	41	35	16	8.8	4.7	3.6	1.1	1.5
26	8.6	6.0	14	7.0	35	35	15	8.8	4.6	3.6	1.1	1.5
27	7.7	5.0	12	7.1	28	69	15	8.8	4.5	3.6	1.0	1.5
28	6.8	4.3	13	8.0	33	161	15	8.8	4.3	3.6	1.0	1.6
29	6.0	4.6	12	7.7	---	120	14	8.7	4.3	3.6	1.0	1.6
30	6.4	4.0	12	29	---	88	14	8.6	4.2	3.6	1.0	1.6
31	6.6	---	14	260	---	62	---	8.5	---	3.6	1.1	---
TOTAL	116.3	205.2	233.6	712.5	1440	1389	708	327.6	183.8	116.7	56.0	39.6
MEAN	3.75	6.84	7.54	23.0	51.4	44.8	23.6	10.6	6.13	3.76	1.81	1.32
MAX	9.0	22	16	260	185	161	45	16	8.2	4.1	3.5	1.6
MIN	1.8	3.4	1.4	7.0	22	25	14	8.5	4.2	3.6	1.0	1.1
AC-FT	230	407	463	1410	2860	2760	1400	650	365	231	111	79

CAL YR 1978 TOTAL 8290.21 MEAN 22.7 MAX 600 MIN 0 AC-FT 16440
WTR YR 1979 TOTAL 5528.30 MEAN 15.1 MAX 260 MIN 1.0 AC-FT 10960

11073200 SAN ANTONIO CREEK BELOW SAN ANTONIO DAM, CA

LOCATION.--Lat 34°09'20", long 117°40'50", in NE¼NE¼SE¼ sec.23, T.1 N., R.8 W., Los Angeles-San Bernardino County line, Hydrologic Unit 18070203, on left wall of outlet channel at toe of San Antonio Dam, and 4.7 mi (7.6 km) northeast of Claremont.

DRAINAGE AREA.--26.9 mi² (69.7 km²).

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,093.94 ft (638.233 m) Corps of Engineers datum.

REMARKS.--Records poor. Flow regulated by San Antonio flood-control reservoir, capacity, 7,620 acre-ft (9.40 hm³). Water diverted out of basin for power, domestic use, and irrigation. See schematic diagram of Santa Ana River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,420 ft³/s (238 m³/s) Jan. 25, 1969, gage height, 11.22 ft (3.420 m), from rating curve extended above 400 ft³/s (11.3 m³/s) on basis of gate openings at dam; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 63 ft³/s (1.78 m³/s) Mar. 22, estimated, gage height unknown; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	.06	.10	.36	2.4	47	16	1.5	.02	
2		.06	0	.05	.10	.36	2.0	46	16	1.0	.02	
3		0	0	.05	.10	.36	1.7	46	16	.75	.01	
4		0	0	.05	.10	.36	17	46	16	.55	.01	
5		2.7	0	.05	.10	.36	22	46	16	.38	.01	
6		6.9	.24	.05	.10	.36	22	45	10	.28	.01	
7		6.0	.10	.05	.10	.36	22	45	8.0	.22	.01	
8		.11	.05	.05	.10	.36	22	44	6.8	.17	.01	
9		.15	.01	.05	.10	.36	22	44	6.0	.14	.01	
10		.04	0	.05	.10	.36	21	44	5.6	.11	.01	
11		.05	0	.05	.10	.36	21	42	5.1	.09	.01	
12		.04	0	.05	.10	.36	21	41	4.6	.08	.01	
13		0	.02	.10	.10	.36	21	40	4.5	.07	.01	
14		0	.05	.10	.10	.36	21	39	4.4	.07	.01	
15		0	.07	.10	.10	.36	21	39	4.4	.06	.01	
16		0	.09	.10	.10	.36	21	39	4.3	.05	.01	
17		0	.10	.10	.10	.36	21	8.0	4.2	.05	.01	
18		0	.09	.10	.10	.36	21	7.2	4.2	.04	.01	
19		0	.06	.10	.16	.36	21	6.4	4.1	.04	.01	
20		0	.06	.10	.16	44	21	5.7	4.0	.04	.01	
21		0	.06	.10	.16	60	21	5.0	3.9	.03	.01	
22		0	.06	.10	.16	63	21	15	3.8	.03	.01	
23		0	.05	.10	.16	62	21	18	3.6	.03	.01	
24		0	.05	.10	.16	60	21	18	3.5	.03	.01	
25		0	.06	.10	.16	50	40	18	3.4	.02	.01	
26		0	.05	.10	.16	20	48	17	3.2	.02	0	
27		0	.06	.10	.16	7.4	48	17	2.9	.02	0	
28		0	.06	.10	.24	9.0	48	17	2.4	.02	0	
29		0	.06	.10	---	4.0	47	17	2.1	.02	0	
30		0	.05	.10	---	3.4	47	16	1.9	.02	0	
31		---	.05	.10	---	2.0	---	16	---	.02	0	---
TOTAL	0	16.05	1.55	2.51	3.48	390.44	726.1	894.3	190.9	5.95	.27	0
MEAN	0	.54	.050	.081	.12	12.6	24.2	28.8	6.36	.19	.009	0
MAX	0	6.9	.24	.10	.24	63	48	47	16	1.5	.02	0
MIN	0	0	0	.05	.10	.36	1.7	5.0	1.9	.02	0	0
AC-FT	0	32	3.1	5.0	6.9	774	1440	1770	379	12	.5	0

CAL YR 1978 TOTAL 18344.68 MEAN 50.3 MAX 866 MIN 0 AC-FT 36390
WTR YR 1979 TOTAL 2231.55 MEAN 6.11 MAX 63 MIN 0 AC-FT 4430

11073360 CHINO CREEK AT SCHAEFER AVENUE, NEAR CHINO, CA

LOCATION.--Lat 34°00'14", long 117°43'34", in Santa Ana del Chino Grant, San Bernardino County, Hydrologic Unit 18070203, on right bank 300 ft (91 m) downstream from Schaefer Avenue, 0.8 mi (1.3 km) downstream from San Antonio Creek, and 1.5 mi (2.4 km) southwest of Chino.

DRAINAGE AREA.--48.9 mi² (126.7 km²).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Concrete wingwalls have formed low-water control since October 1975. Altitude of gage is 685 ft (209 m), from topographic map.

REMARKS.--Records good. Flow mostly regulated by San Antonio flood-control reservoir, capacity, 7,620 acre-ft (9.40 hm³). Natural streamflow affected by extensive ground-water withdrawals, diversions for power, domestic use, irrigation, and return flow from irrigated areas. California Water Project reported releases of 10,266 acre-ft (12.7 hm³) to basin at San Antonio Creek at Rialto pipeline below San Antonio Dam (station 11073210) at a point 10 mi (16 km) upstream. See schematic diagram of Santa Ana River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,190 ft³/s (175 m³/s) Mar. 1, 1978, gage height, 9.66 ft (2.944 m), from rating curve extended above 1,520 ft³/s (43.0 m³/s); no flow May 21, June 30, July 1, Oct. 30, Nov. 3, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 25, 1969, 9,200 ft³/s (261 m³/s), gage height, 9.23 ft (2.813 m), present datum, by contracted-opening measurement at site 6.1 mi (9.8 km) downstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,770 ft³/s (50.1 m³/s) Mar. 27, gage height, 7.50 ft (2.286 m), from floodmarks, from rating curve extended above 1,520 ft³/s (43.0 m³/s); minimum daily 0.04 ft³/s (0.001 m³/s) Dec. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146	96	2.9	.51	75	26	1.0	1.0	.39	.45	.51	.92
2	146	97	.29	.51	65	.92	.92	9.1	.45	.45	.45	.45
3	148	96	.17	.57	6.4	.64	.82	.92	.51	.51	.73	.57
4	148	96	.17	.82	1.4	.64	.57	.64	.51	.51	.57	.39
5	146	96	.21	150	.92	.57	1.0	.82	.45	.45	.57	.45
6	146	96	.04	59	.92	.57	1.2	.73	.45	.45	.64	.34
7	146	96	.63	1.2	.92	.64	1.0	.64	.57	.45	.57	.34
8	146	97	.08	1.8	.92	.73	.92	.57	.39	.39	.57	2.4
9	148	96	.29	1.7	.82	.64	1.5	.51	.29	.45	.51	.51
10	148	125	.08	1.0	.73	.57	1.2	.57	.39	.45	.51	.57
11	148	10	.21	1.3	.73	.57	1.0	.51	.21	.45	.64	.45
12	151	65	.14	.73	.73	.57	1.0	.45	.56	.57	.73	.57
13	151	3.0	.11	.25	.82	16	1.0	.51	.45	.57	.73	.45
14	151	5.6	.21	16	20	.92	1.2	.51	.29	.57	.73	.45
15	151	.17	.21	253	.64	6.7	1.2	.57	.62	.57	.57	.45
16	151	.21	.14	12	.57	8.0	1.2	.57	.45	.57	.51	.45
17	151	.17	169	19	.64	59	.92	.57	.34	.73	.57	.45
18	117	.21	106	14	.64	9.0	.73	1.0	.29	.64	.57	.45
19	99	.21	16	.92	.64	69	.73	.73	.76	.73	.57	.45
20	102	.34	.39	.82	.64	7.0	.92	.57	.82	.64	.64	.51
21	100	65	.21	.57	.64	9.0	.92	.51	.73	.51	.64	.71
22	100	1.6	.21	.57	.64	1.0	.92	.56	.57	.45	.57	.51
23	97	.45	.21	.57	.82	.80	.92	.51	.51	.51	.64	.51
24	99	2.2	.21	.57	.73	.70	1.0	.51	.45	.51	.57	.57
25	97	1.4	.21	.64	.73	.62	1.0	.51	.51	.51	.51	3.3
26	96	.21	.34	.57	.73	.56	1.2	.51	.51	.51	.82	1.3
27	96	.21	.21	.57	.73	470	1.0	.57	.45	.45	3.0	.57
28	96	.11	.25	10	.73	320	1.5	.57	.51	.51	1.8	.51
29	96	.14	.39	.92	---	3.5	1.3	.57	.64	.51	1.2	.51
30	100	.21	.51	110	---	8.0	1.0	.51	.57	.57	.92	.51
31	99	---	.51	360	---	1.6	---	.39	---	.51	.82	---
TOTAL	3916	1146.04	280.53	1037.11	186.83	976.28	30.79	27.21	14.64	16.15	23.38	20.62
MEAN	126	38.2	9.05	33.5	6.68	31.5	1.03	.88	.49	.52	.75	.69
MAX	151	125	169	360	75	470	1.5	9.1	.82	.73	3.0	3.3
MIN	96	.11	.04	.25	.57	.57	.57	.39	.21	.39	.45	.34
AC-FT	7770	2270	556	2060	367	1940	61	54	29	32	46	41

CAL YR 1978 TOTAL 18683.98 MEAN 51.2 MAX 2060 MIN .04 AC-FT 37060
WTR YR 1979 TOTAL 7676.38 MEAN 21.0 MAX 470 MIN .04 AC-FT 15220

11073495 CUCAMONGA CREEK NEAR MIRA LOMA, CA

LOCATION.--Lat 33°58'56", long 117°35'55", in SW¼SW¼NE¼ sec.22, T.2 S., R.7 W., San Bernardino County, Hydrologic Unit 18070203, on right bank 300 ft (91 m) upstream from Merrill Avenue bridge, and 4.6 mi (7.4 km) west of Mira Loma.

DRAINAGE AREA.--75.8 mi² (196.3 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1968 to July 31, 1977, January 1979 to September 1979.

GAGE.--Water-stage recorder. Altitude of gage is 660 ft (201 m) above mean sea level, from topographic map. Prior to July 1977 at site 100 ft (30.5 m) downstream at different datum.

REMARKS.--Records poor. No regulation above station. See schematic diagram of Santa Ana River basin. Station reinstalled after channel construction on Dec. 22, 1978. Channel is now a trapezoidal concrete floodway.

AVERAGE DISCHARGE.--8 years (water years 1969-76) 2.74 ft³/s (0.078 m³/s), 1,990 acre-ft/yr (2.45 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,100 ft³/s (258 m³/s) Jan. 25, 1969, gage height, 7.08 ft (2.158 m), from floodmark, on basis of slope-area measurement of maximum flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 812 ft³/s (23.0 m³/s) Mar. 27, gage height, 4.42 ft (1.347 m); no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			---	.02	22	37	4.5	.03	.01	0	.10	.02
2			---	.02	9.5	.08	5.0	1.4	.01	0	.10	.02
3			---	.02	.08	.45	9.4	.03	.01	0	0	.01
4			---	.06	.03	1.5	10	.03	.01	0	0	.01
5			---	20	.01	.13	5.2	.04	.01	0	0	.01
6			---	1.2	0	.10	2.0	.01	.01	0	0	0
7			---	.01	0	.08	1.0	.01	.01	0	0	0
8			---	.01	0	.07	1.0	.01	.01	0	0	0
9			---	.02	0	.05	2.0	.01	.01	0	0	0
10			---	.02	0	.03	1.0	.01	.01	0	0	0
11			---	.02	0	.02	.50	.01	.01	0	0	0
12			---	.01	0	.02	.30	.01	.02	0	0	0
13			---	.01	.03	1.0	.10	.01	.02	0	0	0
14			---	.02	.01	10	.05	.01	.01	.01	0	0
15			---	10	.01	2.0	.05	.01	.01	.01	0	0
16			---	2.2	0	1.0	.06	.01	.01	.01	0	0
17			---	.04	.01	1.0	.06	.01	.01	.02	0	0
18			---	.06	.01	14	.04	.03	.01	.02	0	0
19			---	.06	.01	56	.02	.10	.01	.03	0	0
20			---	.04	.02	.27	.03	.04	.01	.03	0	0
21			---	.03	48	1.0	.03	.03	.01	.04	0	0
22			.01	.03	9.3	.44	.01	.02	.01	.04	0	0
23			.01	.03	33	1.6	.01	.01	.01	.05	0	0
24			.01	.03	9.1	.71	.01	.01	0	.05	0	.01
25			.01	.07	.03	.03	.01	.01	0	.07	0	.03
26			.02	.03	.04	.07	.01	.01	0	.05	0	.02
27			.02	.03	.04	130	.01	.01	0	.06	0	.05
28			.02	.11	3.6	190	.01	.01	0	.06	0	.10
29			.02	.03	---	37	.01	.01	0	.06	.03	.05
30			.02	3.0	---	24	.01	.01	0	.08	.02	.01
31			.02	60	---	20	---	.01	---	.09	.02	---
TOTAL			---	112.21	135.56	545.37	43.19	1.96	.25	.80	.27	.34
MEAN			---	3.62	4.84	17.6	1.44	.063	.008	.026	.009	.011
MAX			---	60	48	190	10	1.4	.02	.09	.10	.10
MIN			---	.01	0	.02	.01	.01	0	0	0	0
AC-FT			---	223	269	1080	86	3.9	.5	1.6	.5	.7

11073495 CUCAMONGA CREEK NEAR MIRA LOMA, CA--Continued

WATER-QUALITY RECORDS

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAM-FLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM
DEC										
18...	1700	10.0	41	5920	655	--	16	18	26	40
JAN										
05...	1245	11.5	7.8	2160	45	--	37	52	61	66
09...	1620	12.0	4.8	1910	25	--	--	--	--	--
31...	1115	8.5	20	1480	80	--	--	--	--	--
31...	1130	8.5	17	1630	75	31	49	51	61	70
31...	1555	9.5	13	6810	239	--	--	--	--	--
FEB										
01...	0805	9.0	15	2740	111	--	--	--	--	--
02...	1145	10.5	2.6	947	6.2	--	--	--	--	--
MAR										
01...	1230	12.0	113	6600	2010	--	8	11	16	22
01...	1330	12.0	52	6070	852	--	--	--	--	--
SEP										
28...	1230	32.0	.12	25	.01	--	--	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
DEC									
18...	56	--	77	--	96	--	100	--	--
JAN									
05...	79	--	92	--	100	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--
31...	--	78	--	93	--	98	--	100	--
31...	--	--	--	--	--	--	--	--	--
FEB									
01...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
MAR									
01...	--	31	--	60	--	81	--	96	100
01...	--	--	--	--	--	--	--	--	--
SEP									
28...	--	--	--	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	NUMBER OF SAMPLING POINTS	STREAM-FLOW, INSTANTANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
SEP							
28...	1220	3	.12	1	2	4	10

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP						
28...	32	41	47	56	76	100

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA
(National stream-quality accounting network station)

LOCATION.--Lat 33°53'00", long 117°38'40", in La Sierra Grant, Riverside County, Hydrologic Unit 18070203, on left bank of outlet channel, 2,500 ft (762 m) downstream from axis of Prado Dam, and 4.5 mi (7.2 km) west of Corona.

DRAINAGE AREA.--1,490 mi² (3,859 km²), excludes 768 mi² (1,989 km²) above Lake Elsinore.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1930 to November 1939 (irrigation seasons only), March 1940 to current year. Published as "at Santa Fe Railroad Bridge, near Prado" May 1930 to November 1931, as "at Atchison, Topeka, and Santa Fe Railroad Bridge, near Prado" May 1932 to November 1939, and as "below Prado Dam, near Prado" March 1940 to September 1950.

GAGE.--Water-stage recorder and concrete control since August 1944. Datum of gage is approximately 449 ft (136.9 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Mar. 18, 1940, at about same site at various datums.

REMARKS.--Records good. Flow regulated since 1941 by Prado Reservoir, capacity, 201,200 acre-ft (248 hm³). Natural streamflow affected by extensive ground-water withdrawals, diversion for irrigation, and return flow from irrigated areas. California Water Project released 1,770 acre-ft (2.18 hm³) to basin (see station 11073360). See schematic diagram of Santa Ana River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,800 ft³/s (164 m³/s) Jan. 26, 1969, gage height, 5.75 ft (1.753 m); minimum daily 2.4 ft³/s (0.068 m³/s) July 29 to Aug. 3, Sept. 28, 1978 (result of gate closure).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 2, 1938, reached a discharge of 100,000 ft³/s (2,830 m³/s), by slope-area measurement at site 2.5 mi (4.0 km) downstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 606 ft³/s (17.2 m³/s) Jan. 6, gage height, 3.83 ft (1.167 m); minimum daily, 12 ft³/s (0.34 m³/s) May 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	203	178	122	146	297	191	214	251	191	251	275	75
2	204	183	124	146	303	176	220	156	191	271	275	75
3	210	186	124	148	286	176	220	12	191	288	271	73
4	213	182	125	148	262	176	249	88	191	282	271	75
5	214	185	126	146	278	176	265	198	194	282	268	84
6	216	183	126	342	300	172	271	197	194	282	265	69
7	218	181	125	588	264	196	265	222	124	282	261	69
8	219	160	124	566	224	206	268	235	69	276	268	68
9	218	157	122	421	235	188	268	191	185	278	271	66
10	251	175	121	372	217	177	264	116	185	278	261	63
11	230	250	126	367	215	179	261	157	182	275	254	65
12	221	309	128	433	214	179	265	197	182	275	238	66
13	218	220	129	420	215	177	265	197	182	271	226	71
14	218	171	131	417	214	172	265	197	209	271	133	82
15	217	144	132	410	212	177	261	185	226	268	92	95
16	218	126	135	412	212	176	299	200	226	268	86	75
17	223	126	143	403	209	172	326	197	226	265	86	76
18	215	125	195	408	209	172	320	197	230	265	82	79
19	175	123	204	333	209	176	316	197	251	261	88	77
20	171	122	239	283	209	172	285	197	251	261	86	76
21	174	122	203	279	211	172	265	197	254	261	90	64
22	176	126	164	279	215	172	265	197	258	261	88	65
23	164	126	142	316	217	169	265	197	258	282	82	65
24	168	126	162	339	217	169	268	197	258	295	78	67
25	174	126	162	337	217	169	268	196	258	295	78	67
26	170	126	150	292	216	169	265	196	251	295	76	67
27	176	122	157	263	215	176	265	196	251	292	75	66
28	177	116	157	262	215	179	265	196	251	288	88	66
29	188	118	157	258	---	182	265	196	251	285	84	70
30	188	122	157	258	---	199	261	196	251	282	84	70
31	189	---	157	278	---	215	---	203	---	278	82	---
TOTAL	6212	4716	4956	9826	6507	5541	8025	5732	6429	8566	4962	2146
MEAN	200	157	160	317	232	179	268	185	214	276	160	71.5
MAX	251	309	239	588	303	215	326	251	258	295	275	95
MIN	164	116	121	146	209	169	214	12	69	251	75	63
AC-FT	12320	9350	9830	19490	12910	10990	15920	11370	12750	16990	9840	4260

CAL YR 1978 TOTAL 136076.5 MEAN 373 MAX 2470 MIN 2.4 AC-FT 269900
WTR YR 1979 TOTAL 73210.0 MEAN 201 MAX 588 MIN 12 AC-FT 145200

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to current year.
CHEMICAL ANALYSES: Water years 1967 to current year.
BIOLOGICAL DATA: Water years 1975 to current year.
SPECIFIC CONDUCTANCE: Water years 1970 to current year.
WATER TEMPERATURES: Water years 1970 to current year.
SEDIMENT RECORDS: Water years 1974 to current year.

PERIOD OF DAILY RECORD.--
CHLORIDE: October 1970 to September 1971.
SPECIFIC CONDUCTANCE: October 1969 to current year.
WATER TEMPERATURES: October 1969 to current year.
SEDIMENT RECORDS.--October 1973 to current year.

INSTRUMENTATION.--Water-quality monitor October 1970 to September 1971. Specific-conductance recorder since October 1969. Temperature recorder since October 1969.

COOPERATION.--Pesticide samples were collected by U.S. Geological Survey and analyzed by Environmental Protection Agency. The letter "A" following a date indicates chemical-quality data furnished by California Department of Water Resources.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,830 micromhos Apr. 30, 1971; minimum recorded, 220 micromhos Feb. 20, 1978.
WATER TEMPERATURES: Maximum recorded, 36.0°C Sept. 4, 1972; minimum recorded, 2.5°C Dec. 30, 1969.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,870 mg/L Mar. 5, 1978; minimum daily mean, 6 mg/L July 3-5, 1978, Mar. 16, 17, 1979.
SEDIMENT DISCHARGE: Maximum daily, 18,900 tons (17,100 metric tons) Mar. 5, 1978; minimum daily, 0.58 tons (0.53 metric tons) Sept. 20, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,650 micromhos July 24; minimum recorded, 220 micromhos Feb. 20.
WATER TEMPERATURES: Maximum recorded, 28.0°C July 26, 27; minimum recorded, 10.5°C Nov. 20, 22, Dec. 14, 19, 20.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 455 mg/L Aug. 21; minimum daily mean, 6 mg/L Mar. 16, 17.
SEDIMENT DISCHARGE: Maximum daily, 329 tons (298 metric tons) Jan. 7; minimum daily, 0.29 tons (0.26 metric tons) May 3.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
24...A	0945	174	760	7.9	16.0	40	--	7.8	--	--	--
24...	1445	176	820	7.9	19.0	--	50	7.0	74	3850	K2700
NOV											
20...A	1020	116	1050	7.6	11.0	10	--	8.6	--	--	--
29...	1300	114	1240	7.9	12.5	--	11	8.8	30	1400	940
DEC											
11...	1310	122	1110	8.0	10.5	10	--	9.5	--	--	--
19...	1520	239	850	7.6	10.5	--	150	10.0	52	--	--
JAN											
19...	1115	325	900	7.3	11.5	--	18	8.9	46	--	--
25...A	1650	335	820	8.0	11.0	20	--	8.6	--	--	--
FEB											
20...A	1445	216	1080	7.6	12.5	--	8.4	9.0	44	5770	K170
20...A	1820	215	990	7.9	10.0	5	--	8.4	--	--	--
MAR											
14...	1200	177	980	7.2	13.5	--	4.6	8.0	54	K600	K3600
20...	1330	172	1110	7.4	15.0	--	12	--	36	--	--
21...A	1305	172	420	7.6	13.0	10	--	7.4	--	--	--
APR											
19...A	1645	316	640	7.6	14.0	5	--	8.0	--	--	--
25...	1200	262	860	7.4	16.0	--	3.0	7.4	31	--	--
MAY											
09...	1300	233	610	7.5	17.5	--	1.5	6.9	31	K400	K700
15...A	1740	290	630	7.3	17.0	5	--	7.2	--	--	--
JUN											
19...A	1010	251	860	7.1	20.0	1	--	6.3	--	--	--
26...	1000	257	1020	7.8	21.0	--	2.5	9.2	61	--	--
JUL											
12...	1015	281	1080	7.5	22.0	--	10	7.2	22	K5	3750
19...A	1500	261	980	7.5	23.0	1	--	6.8	--	--	--
AUG											
08...	1130	286	1025	7.7	25.0	--	12	7.2	30	K6	36
22...A	1015	40	1050	7.7	19.0	900	--	6.9	--	--	--
SEP											
12...	1145	72	1300	7.7	20.5	--	80	7.8	51	--	5000

K Results based on colony count outside the acceptable range (non-ideal colony count).

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT											
24...A	230	--	62	19	84	43	2.4	7.0	170	86	100
24...	230	61	61	19	87	44	2.5	7.1	170	87	120
NOV											
28...A	350	--	100	25	110	48	2.5	9.0	250	130	130
29...	350	98	99	25	110	48	2.6	9.5	260	130	140
DEC											
11...A	380	--	110	27	110	38	2.4	9.0	280	130	140
19...	240	93	66	19	84	42	2.3	9.6	150	110	110
JAN											
19...	270	93	78	19	83	39	2.2	12	180	120	110
25...A	280	--	78	20	82	38	2.1	12	200	160	98
FEB											
20...A	330	130	92	24	85	35	2.0	12	200	140	120
20...A	360	--	95	25	99	38	2.3	8.0	210	140	130
MAR											
14...	270	63	78	19	81	38	2.1	16	230	100	100
20...	350	200	97	26	96	37	2.2	9.6	150	140	140
21...A	310	--	85	23	86	37	2.1	13	200	120	110
APR											
19...A	220	--	63	15	68	36	1.8	10	170	76	73
25...	230	29	62	18	72	39	2.1	11	200	96	82
MAY											
09...	260	54	76	18	69	35	1.8	11	210	82	85
19...A	280	--	78	20	82	39	2.1	5.0	210	95	98
JUN											
19...A	290	--	82	21	98	30	2.3	13	230	98	110
26...	330	75	94	22	90	36	2.2	13	250	110	110
JUL											
12...	270	67	74	20	88	38	2.1	11	200	100	95
19...A	310	--	85	24	96	39	2.4	14	250	110	110
AUG											
08...	310	67	85	23	100	48	2.5	15	260	140	120
22...A	350	--	100	25	120	42	2.8	9.0	250	130	140
SEP											
12...	360	87	100	26	110	39	2.5	8.9	270	170	140

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS NO2)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
OCT											
24...A	.9	--	436	--	--	5.2	23	--	--	--	--
24...	.4	21	510	505	--	--	--	--	--	3.2	--
NOV											
28...A	.4	--	711	--	0	4.1	34	.41	1.3	--	--
29...	.5	25	760	695	--	--	--	--	--	9.0	--
DEC											
11...A	.7	--	722	--	26	8.7	32	.98	1.0	--	--
19...	.4	13	516	502	--	--	--	--	--	3.7	--
JAN											
19...	.4	.6	567	532	--	--	--	--	--	2.8	--
25...A	.4	--	592	--	30	4.5	31	.40	1.3	--	--
FEB											
20...A	.5	10	613	613	--	--	--	--	--	3.9	--
20...A	.9	--	650	--	3	3.0	23	.40	1.3	--	--
MAR											
14...	.5	10	530	501	--	--	--	--	--	1.2	--
20...	.5	19	600	610	--	--	--	--	--	3.0	--
21...A	.5	--	605	--	17	3.7	20	.35	1.2	--	--
APR											
19...A	.4	--	410	--	11	2.2	9.8	.23	.76	--	--
25...	.5	23	511	489	--	--	--	--	--	2.3	--
MAY											
09...	.5	19	515	497	--	--	--	--	--	1.6	--
19...A	.6	--	587	--	--	2.2	9.6	.30	.99	--	--
JUN											
19...A	.6	--	507	--	--	3.4	15	--	--	--	--
26...	.6	11	607	601	--	--	--	--	--	1.5	--
JUL											
12...	.6	9.6	563	511	--	--	--	--	--	1.6	--
19...A	.6	--	672	--	--	2.2	9.6	--	--	--	--
AUG											
08...	.6	13	665	653	--	--	--	--	--	1.9	--
22...A	.8	--	781	--	--	9.9	44	--	--	--	--
SEP											
12...	.7	20	787	784	--	--	--	--	--	8.6	8.9

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT										
24...A	--	--	--	--	--	--	--	--	--	--
24...	1.5	1.3	2.8	.20	2.6	6.0	2.80	2.70	1.8	--
NOV										
28...A	3.1	1.0	--	--	--	--	2.00	--	--	1.9
29...	4.5	.50	5.0	.20	4.8	10	2.90	2.70	3.3	--
DEC										
11...A	3.5	.94	--	--	--	--	2.70	--	--	2.5
19...	1.1	1.8	2.9	.70	2.2	6.6	.790	.72	.64	--
JAN										
19...	3.8	1.1	4.9	.40	4.5	7.7	1.90	1.80	1.5	--
25...A	2.4	1.2	--	--	--	--	2.40	--	--	1.0
FEB										
20...A	2.3	1.5	3.8	.30	3.5	7.3	1.90	--	--	--
20...A	2.1	[illegible]	--	--	--	--	2.50	--	--	1.0
MAR										
14...	4.7	--	4.8	--	--	5.8	2.60	2.40	--	--
20...	3.7	.70	4.4	.10	4.3	7.4	1.10	1.10	--	--
21...A	2.2	.87	--	--	--	--	1.60	--	--	1.1
APR										
19...A	1.5	.94	--	--	--	--	1.80	--	--	1.5
25...	2.2	1.0	3.2	.00	3.2	5.5	1.70	1.50	--	--
MAY										
09...	2.3	1.1	3.4	2.8	.65	5.0	1.80	1.70	5.5	--
15...A	.80	1.1	--	--	--	--	1.20	--	--	1.2
JUN										
19...A	--	--	--	--	--	--	--	--	--	2.0
20...	1.5	1.0	2.5	.10	2.4	4.0	1.10	1.00	3.4	--
JUL										
12...	.73	1.1	1.8	1.6	.21	3.4	3.80	3.60	--	--
19...A	--	--	--	--	--	--	--	--	--	1.7
AUG										
08...	.50	1.5	2.0	.20	1.8	3.9	2.80	1.20	--	--
22...A	--	--	--	--	--	--	--	--	--	3.0
SEP										
12...	2.2	1.5	3.7	.80	2.9	12	3.30	.05	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
OCT											
24...A	0940	--	--	--	--	--	--	300	--	--	--
24...	1445	5	4	--	--	60	420	--	--	--	23
NOV											
28...A	1020	--	--	--	--	--	--	400	--	--	--
DEC											
11...A	1310	--	--	--	--	--	--	500	--	--	--
JAN											
09...A	1330	4	--	100	--	--	270	--	10	--	--
19...	1115	5	4	100	100	0	370	--	--	--	--
25...A	1050	--	--	--	--	--	--	300	--	--	--
FEB											
20...A	1020	--	--	--	--	--	--	300	--	--	--
MAR											
20...	1330	5	--	100	--	--	300	--	5	--	--
21...A	1305	--	--	--	--	--	--	300	--	--	--
APR											
19...A	1045	--	--	--	--	--	--	200	--	--	--
25...	1200	5	35	--	--	80	350	--	1	0	<1
MAY											
15...A	1740	--	0	--	--	--	--	300	--	--	10
JUN											
19...A	1010	--	--	--	--	--	--	400	--	--	--
JUL											
12...	1015	4	6	100	30	70	--	--	0	0	<1
19...A	1500	--	--	--	--	--	--	400	--	--	--
AUG											
22...A	1015	--	--	--	--	--	--	500	--	--	--

< Actual value is known to be less than the value shown.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
OCT										
24...A	--	--	--	--	--	--	--	--	--	--
24...	10	10	0	2	1	<1	17	12	5	4400
NOV										
28...A	--	--	--	--	--	--	--	--	--	--
DEC										
11...A	--	--	--	--	--	--	--	--	--	--
JAN										
09...A	10	--	--	8	--	--	13	--	--	5800
19...	20	10	10	2	0	2	13	6	7	1500
25...A	--	--	--	--	--	--	--	--	--	--
FEB										
28...A	--	--	--	--	--	--	--	--	--	--
MAR										
20...	10	--	--	0	0	--	14	--	--	450
21...A	--	--	--	--	--	--	--	--	--	--
APR										
19...A	--	--	--	--	--	--	--	--	--	--
25...	10	10	0	--	--	<3	15	8	7	420
MAY										
15...A	--	--	--	--	--	--	--	--	10	--
JUN										
19...A	--	--	--	--	--	--	--	--	--	--
JUL										
12...	10	10	0	1	0	<3	3	1	2	270
19...A	--	--	--	--	--	--	--	--	--	--
AUG										
22...A	--	--	--	--	--	--	--	--	--	--

DATE	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)
OCT										
24...A	--	--	--	--	--	--	--	--	--	--
24...	4400	40	120	72	48	230	70	160	.0	.0
NOV										
28...A	--	--	--	--	--	--	--	--	--	--
DEC										
11...A	--	--	--	--	--	--	--	--	--	--
JAN										
09...A	--	--	91	--	--	240	--	--	.0	--
19...	1400	70	--	--	--	290	80	210	.0	.0
25...A	--	--	--	--	--	--	--	--	--	--
FEB										
28...A	--	--	--	--	--	--	--	--	--	--
MAR										
20...	--	--	79	--	--	440	--	--	.0	--
21...A	--	--	--	--	--	--	--	--	--	--
APR										
19...A	--	--	--	--	--	--	--	--	--	--
25...	10	410	40	38	2	310	0	330	.1	.0
MAY										
15...A	--	60	--	--	0	--	--	--	.0	--
JUN										
19...A	--	--	--	--	--	--	--	--	--	--
JUL										
12...	240	30	6	6	0	280	0	260	.1	.0
19...A	--	--	--	--	--	--	--	--	--	--
AUG										
22...A	--	--	--	--	--	--	--	--	--	--

< Actual value is known to be less than the value shown.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT										
24...A	--	--	--	--	--	--	--	--	--	--
24...	.0	1	0	1	1	1	0	40	30	9
NOV										
28...A	--	--	--	--	--	--	--	--	--	--
DEC										
11...A	--	--	--	--	--	--	--	--	--	--
JAN										
09...A	--	1	--	--	1	--	--	30	--	--
19...	.0	1	0	1	0	0	0	50	10	40
25...A	--	--	--	--	--	--	--	--	--	--
FEB										
28...A	--	--	--	--	--	--	--	--	--	--
MAR										
20...	--	0	--	--	0	--	--	60	--	--
21...A	--	--	--	--	--	--	--	--	--	--
APR										
19...A	--	--	--	--	--	--	--	--	--	--
25...	.1	1	0	1	3	3	0	50	30	20
MAY										
15...A	--	--	--	--	--	--	--	--	--	--
JUN										
19...A	--	--	--	--	--	--	--	--	--	--
JUL										
12...	.1	0	0	0	0	0	0	20	20	5
19...A	--	--	--	--	--	--	--	--	--	--
AUG										
22...A	--	--	--	--	--	--	--	--	--	--

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	METHY-LENE BLUE ACTIVE SUR-STANCE (MG/L)	PCB, TOTAL (UG/L)
OCT							
19...A	1710	13	--	--	--	.30	--
24...	1445	--	6.8	2.1	.01	.40	--
NOV							
27...A	1300	--	--	--	--	--	ND
28...A	1020	--	--	--	--	.90	--
29...	1300	16	--	--	--	--	--
DEC							
11...A	1310	--	--	--	--	.84	--
19...	1520	12	--	--	--	--	--
JAN							
09...A	1330	8.5	--	--	.01	.30	.0
19...	1115	--	9.0	1.1	.01	.20	.0
25...A	1050	--	--	--	--	.84	--
FEB							
20...A	1425	--	--	--	--	--	ND
20...	1445	8.9	--	--	--	--	--
28...A	1020	--	--	--	--	.34	--
MAR							
14...	1200	14	--	--	--	--	--
20...	1330	9.4	--	--	.01	.20	.0
21...A	1305	--	--	--	--	.34	--
APR							
19...A	1645	--	--	--	--	.15	--
25...	1200	--	11	.7	.00	.10	.0
MAY							
09...	1300	8.9	--	--	--	--	--
22...A	0850	10	--	--	--	.33	--
JUN							
19...A	1010	--	--	--	--	.26	--
26...A	1000	8.7	--	--	--	--	--
JUL							
12...	1015	--	11	.3	.00	.20	--
19...A	1500	--	--	--	--	.26	--
AUG							
08...	1130	17	--	--	--	--	--
22...A	1015	--	--	--	--	.77	--
SEP							
12...	1145	11	--	--	--	--	--

ND Material specifically analyzed for but not detected.

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)
NOV									
27...A	1300	ND	ND	ND	ND	ND	ND	ND	--
JAN									
09...A	1330	.00	.0	.00	.00	.01	.00	.00	.01
19...	1115	.00	.0	.00	.00	.00	.00	.00	.00
FEB									
28...A	1425	ND	ND	ND	ND	ND	ND	ND	--
MAR									
20...	1330	.00	.0	.00	.00	.00	.03	.00	.00
APR									
25...	1200	.00	.0	.00	.00	.00	.06	.00	.00

DATE	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)
NOV									
27...A	ND	ND	ND	ND	ND	ND	ND	ND	ND
JAN									
09...A	.00	.00	.00	.00	.02	.04	--	.00	.00
19...	.00	.00	.00	.00	.01	.03	--	.00	.00
FEB									
28...A	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR									
20...	.00	.00	.00	.00	.02	.01	--	.00	.00
APR									
25...	.00	.00	.00	.00	.02	.00	--	.00	.00

DATE	MIREX, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)
NOV								
27...A	--	ND	--	--	ND	ND	--	--
JAN								
09...A	.00	.03	.00	.01	0	.00	.00	.00
19...	.00	.00	.00	.00	0	.00	.00	.00
FEB								
28...A	--	ND	--	--	ND	ND	--	--
MAR								
20...	.00	.00	.00	.00	0	.00	.17	.00
APR								
25...	.00	.00	.00	.01	0	.00	.18	.00

ND Material specifically analyzed for but not detected.

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	OCT 24,78	NOV 29,78	DEC 19,78	JAN 19,79	MAR 14,79
TIME	1445	1300	1520	1115	1200
TOTAL CELLS/ML	1100	2800	1500	2600	3600
DIVERSITY: DIVISION	1.0	1.6	1.6	1.4	1.1
.CLASS	1.0	1.6	1.6	1.5	1.2
..ORDER	1.2	2.4	2.0	1.9	1.4
...FAMILY	1.9	3.0	2.5	1.9	1.4
....GENUS	2.0	3.5	2.7	2.1	1.7

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHARACIACEAE										
....SCHROEDERIA	--	-	--	-	--	-	--	-	--	-
...MICRACTINIACEAE										
....GOLENKINIA	--	-	--	-	--	-	--	-	--	-
....MICRACTINIUM	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	67	2	15	1	--	-	19	1
....CHODATELLA	44	4	67	2	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	67	2	--	-	--	-	--	-
....FRANCEIA	--	-	22	1	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	--	-	--	-
....OOCYSTIS	--	-	89	3	--	-	--	-	--	-
....TREUBARIA	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....CRUCIGENIA	--	-	--	-	--	-	--	-	--	-
....SCENEDESMUS	--	-	270	10	--	-	180	7	76	2
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	510#	19	69	5	64	2	--	-
....CHLOROGONIUM	--	-	--	-	--	-	--	-	--	-
...PHACOTACEAE										
....PTEROMONAS	--	-	290	10	--	-	--	-	--	-
...VOLVOCACEAE										
....GONIUM	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	44	4	360	13	62	4	*	0	57	2
....MELOSIRA	--	-	--	-	39	3	--	-	--	-
....SKELETONEMA	--	-	44	2	--	-	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....COCCONEIS	--	-	--	-	23	2	--	-	--	-
...CYMBELLACEAE										
....AMPHORA	--	-	--	-	8	1	--	-	--	-
....CYMBELLA	--	-	--	-	--	-	--	-	*	0
...FRAGILARIACEAE										
....FRAGILARIA	--	-	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	8	1	--	-	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	22	1	8	1	--	-	38	1
...NAVICULACEAE	--	-	--	-	--	-	--	-	--	-
....GYROSIGMA	--	-	--	-	15	1	--	-	--	-
....NAVICULA	220#	19	160	6	250#	17	*	0	130	4
....PINNULARIA	44	4	--	-	--	-	--	-	--	-
...NITZSCHIACEAE										
....NITZSCHIA	530#	46	130	5	180	12	--	-	--	-
.CHRYSOPHYCEAE										
..CHRYSOMONADALES										
...OCHROMONADACEAE										
....OCHROMONAS	--	-	--	-	--	-	--	-	*	0
.XANTHOPHYCEAE										
..HETEROCOCCALES										
...CHLOROTHECIACEAE										
....OPHIOCYTIUM	--	-	--	-	--	-	*	0	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	46	3	--	-	--	-
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	--	-	--	-	--	-	19	1

See footnotes at end of table.

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	OCT 24,78		NOV 29,78		DEC 19,78		JAN 19,79		MAR 14,79	
TIME	1445		1300		1520		1115		1200	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	--	-	2600#	71
....ANACYSTIS	260#	23	--	-	--	-	830#	32	76	2
....COCCOCHLORIS	--	-	--	-	31	2	*	0	--	-
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	--	-	--	-	--	-	--	-	95	3
...OSCILLATORIACEAE										
....LYNGBYA	--	-	270	10	--	-	--	-	--	-
....OSCILLATORIA	--	-	330	12	690#	46	250	10	--	-
....SPIRULINA	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....EUGLENA	--	-	44	2	8	1	1100#	43	380	10
....PHACUS	--	-	--	-	31	2	--	-	--	-
....TRACHELOMONAS	--	-	22	1	8	1	110	4	130	4

DATE	MAY 9,79		JUN 26,79		JUL 12,79		AUG 8,79		SEP 12,79	
TIME	1300		1045		1015		1130		1145	
TOTAL CELLS/ML	3200		4100		600		41000		3600	
DIVERSITY: DIVISION	1.1		0.4		1.0		1.2		1.2	
.CLASS	1.1		0.4		1.0		1.2		1.2	
..ORDER	1.1		0.4		1.0		1.7		1.3	
...FAMILY	1.8		0.5		1.8		2.4		2.1	
....GENUS	2.3		0.5		0.0		2.8		2.1	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHARACIACEAE										
....SCHROEDERIA	43	1	77	2	340#	56	770	2	--	-
...MICRACTINIACEAE										
....GOLENKINIA	*	0	--	-	--	-	--	-	--	-
....MICRACTINIUM	--	-	--	-	--	-	2000	5	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	160	5	--	-	--	-	1500	4	--	-
....CHODATELLA	--	-	--	-	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-	120	3
....FRANCEIA	--	-	--	-	--	-	--	-	--	-
....KIRCHNERIELLA	100	3	--	-	--	-	--	-	--	-
....OOCYSTIS	57	2	--	-	--	-	--	-	--	-
....TREUBARIA	330	10	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....CRUCIGENIA	1000#	31	--	-	--	-	--	-	--	-
....SCENEDESMUS	110	4	--	-	--	-	14000#	33	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	--	-	5100	12	--	-
....CHLOROGONIUM	--	-	--	-	--	-	260	1	--	-
...PHACOTACEAE										
....PTEROMONAS	--	-	--	-	--	-	510	1	--	-
...VOLVOCACEAE										
....GONIUM	--	-	--	-	--	-	2000	5	--	-

See footnotes at end of table.

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	MAY 9.79		JUN 26.79		JUL 12.79		AUG 8.79		SEP 12.79	
TIME	1300		1045		1015		1130		1145	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	29	1	--	-	5	1	6700#	16	51	1
....MELOSIRA	--	-	--	-	--	-	6700#	16	--	-
....SKELETONEMA	--	-	--	-	--	-	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....COCCONEIS	--	-	--	-	--	-	--	-	*	0
...CYMBELLACEAE										
....AMPHORA	--	-	--	-	--	-	--	-	--	-
....CYMBELLA	--	-	--	-	--	-	--	-	--	-
...FRAGILARIACEAE										
....FRAGILARIA	--	-	--	-	--	-	--	-	360	10
....SYNEDRA	--	-	*	0	25	4	--	-	*	0
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	--	-	100#	17	--	-	--	-
...NAVICULACEAE	--	-	--	-	86	14	--	-	--	-
....GYROSIGMA	--	-	--	-	--	-	--	-	--	-
....NAVICULA	*	0	77	2	20	3	--	-	730#	20
....PINNULARIA	--	-	--	-	--	-	--	-	--	-
...NITZSCHIACEAE										
....NITZSCHIA	--	-	52	1	25	4	--	-	670#	19
.CHRYSOPHYCEAE										
..CHRYSOMONADALES										
...OCHROMONADACEAE										
....OCHROMONAS	--	-	--	-	--	-	--	-	--	-
.XANTHOPHYCEAE										
..HETEROCOCCALES										
...CHLOROTHECIACEAE										
....OPHIOCYTIUM	--	-	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	--	-	--	-	--	-
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	2000	5	--	-
....ANACYSTIS	--	-	26	1	--	-	--	-	--	-
....COCCOCHLORIS	--	-	--	-	--	-	--	-	--	-
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	--	-	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE										
....LYNGBYA	--	-	--	-	--	-	--	-	--	-
....OSCILLATORIA	1300#	41	3900#	94	--	-	--	-	1600#	45
....SPIRULINA	*	0	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....EUGLENA	29	1	--	-	--	-	--	-	--	-
....PHACUS	--	-	--	-	--	-	--	-	*	0
....TRACHELOMONAS	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PERIPHYTON

DATE	TIME	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	LENGTH OF EXPOSURE (DAYS)
OCT 24...	1445	1.01	.430	7.32	5.83	34
NOV 29...	1300	.790	.000	2.28	1.81	36
MAR 14...	1200	13.6	1.82	6.61	4.17	105
JUN 26...	1600	63.8	24.5	--	--	62

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	720	670	689	888	800	840	1310	1090	1180	---	---	---
2	702	674	686	879	855	864	1250	1160	1200	1000	974	977
3	716	672	691	885	859	874	1250	1150	1190	1100	972	1040
4	760	682	724	894	862	879	1220	1150	1190	1080	1040	1060
5	757	711	728	897	871	887	1260	1160	1220	1120	940	1050
6	770	712	736	891	851	874	1210	1170	1200	1030	313	419
7	762	710	734	916	858	876	1200	1190	1190	465	391	413
8	751	701	725	931	911	923	1190	1190	1190	607	467	559
9	770	710	733	929	909	922	1190	1190	1190	737	591	655
10	775	721	741	936	756	899	1210	1190	1190	835	745	776
11	794	750	772	989	853	942	1230	1160	1200	876	762	822
12	794	752	774	995	807	853	1200	1170	1190	914	818	848
13	781	735	761	1010	836	930	1240	1180	1200	944	770	881
14	766	728	751	1060	997	1020	1290	1190	1230	965	887	918
15	757	723	740	1140	1000	1060	1220	1180	1200	925	877	897
16	750	730	742	1160	1020	1100	1200	1190	1190	885	811	836
17	768	736	754	1190	1040	1140	1200	822	1170	847	743	800
18	811	743	766	1220	1080	1160	---	---	---	882	748	813
19	832	808	821	1240	1120	1190	---	---	---	994	824	893
20	825	813	819	1230	1120	1190	---	---	---	970	786	871
21	834	802	821	1230	1150	1200	---	---	---	966	874	927
22	838	810	824	1150	998	1040	---	---	---	1000	856	926
23	835	807	825	1250	975	1100	---	---	---	918	818	873
24	822	802	815	1190	1030	1100	---	---	---	1010	860	895
25	831	805	820	1160	988	1070	---	---	---	892	788	843
26	832	802	820	1090	965	1050	---	---	---	986	894	929
27	825	795	815	1180	1070	1120	---	---	---	996	886	941
28	812	788	804	---	---	---	---	---	---	1000	898	948
29	811	789	802	1260	1150	1200	---	---	---	1000	910	952
30	810	792	804	1260	1120	1180	---	---	---	970	868	926
31	807	783	799	---	---	---	---	---	---	866	782	824
MONTH	838	670	769	1260	756	1020	---	---	---	1120	313	850

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	1100	938	1040	628	574	599	788	744	767
2	---	---	---	1110	1050	1090	686	580	639	848	750	783
3	---	---	---	1110	1040	1080	746	680	717	982	854	920
4	---	---	---	1090	1040	1070	750	712	731	1020	790	934
5	834	738	802	1060	992	1020	744	688	713	842	790	810
6	930	840	891	1020	898	979	764	642	713	838	786	813
7	978	904	952	1040	986	1010	760	706	723	854	814	833
8	1020	932	987	1020	964	990	750	706	723	856	804	833
9	998	918	959	986	954	972	758	690	727	868	678	828
10	978	916	953	978	940	958	758	698	725	887	847	863
11	1040	888	945	970	934	948	758	698	726	995	911	944
12	962	880	929	956	930	941	728	696	714	1030	950	992
13	974	840	920	942	920	925	752	708	730	986	922	958
14	982	840	907	930	896	918	798	740	772	955	931	945
15	962	850	911	950	904	927	820	762	789	969	927	948
16	944	848	887	1010	892	944	854	738	784	970	918	947
17	936	844	887	988	914	959	826	728	769	970	910	937
18	1010	892	953	1090	950	1030	802	718	742	955	875	910
19	1070	878	968	1140	1060	1100	768	708	740	887	885	886
20	1040	886	986	1120	1050	1080	812	712	753	889	889	889
21	1180	874	1000	1050	912	985	900	770	817	894	894	894
22	1050	1010	1030	898	814	856	934	830	876	898	874	894
23	1010	894	952	836	772	799	918	848	878	908	892	899
24	916	864	886	866	782	833	890	824	855	922	910	914
25	932	872	890	916	880	892	862	820	832	927	927	927
26	888	856	873	940	882	916	856	786	816	931	931	931
27	932	858	892	950	894	925	816	762	787	935	935	935
28	1060	866	975	978	902	938	806	754	779	939	933	936
29	---	---	---	980	926	961	790	744	770	940	938	940
30	---	---	---	974	832	905	784	728	755	944	944	944
31	---	---	---	848	640	744	---	---	---	948	908	936
MONTH	1180	738	931	1140	640	959	934	574	756	1030	678	900

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	942	908	927	1050	998	1020	962	948	954	1150	1110	1140
2	958	914	941	1010	981	999	981	973	976	1150	1100	1130
3	996	942	963	1010	967	984	987	983	986	1170	1130	1140
4	977	941	961	1000	956	981	1000	986	995	1170	1150	1160
5	981	959	968	999	967	982	1040	996	1010	1220	1170	1210
6	979	945	965	1000	970	985	1050	1030	1050	1220	1150	1200
7	1030	957	996	995	969	984	1050	1030	1040	1210	1180	1190
8	1040	918	982	1010	976	993	1040	1020	1030	1220	1190	1210
9	1060	1010	1030	1020	981	996	1040	1020	1030	1230	1200	1220
10	1050	1010	1030	1010	968	996	1060	1020	1030	1240	1220	1230
11	1060	1000	1030	1010	991	1000	1060	1050	1050	1290	1230	1260
12	1030	980	1010	1010	972	994	1060	1060	1060	1330	1250	1300
13	1020	969	993	1000	968	987	1170	1060	1070	1280	1230	1250
14	1010	972	987	992	958	981	1240	1190	1210	1240	1190	1220
15	1010	974	992	982	940	963	1200	1180	1190	1230	1150	1200
16	1010	973	992	968	942	951	1190	1140	1180	1180	1090	1150
17	1010	972	989	1000	946	976	1150	1130	1140	1110	1060	1090
18	1010	967	984	1040	982	991	1200	1120	1150	1090	1070	1080
19	1010	951	987	1010	980	993	1190	1110	1130	1120	1080	1100
20	1010	948	979	1010	976	990	1130	1090	1110	1160	1100	1120
21	1020	961	995	1010	946	981	1090	1000	1050	1190	1160	1180
22	1030	977	1010	980	940	951	1060	1010	1040	1180	1150	1160
23	1030	986	1010	968	942	953	1050	980	1030	1160	1130	1140
24	1040	1000	1020	994	966	986	1040	984	1010	1140	1080	1110
25	1050	1000	1030	1010	970	996	1040	998	1020	1100	1060	1080
26	1050	1010	1030	994	964	981	1050	1010	1030	1110	1090	1100
27	1050	1030	1040	1030	972	997	1060	1020	1040	1140	1110	1120
28	1060	1010	1040	1010	964	991	1050	1030	1040	1150	1130	1140
29	1050	1010	1040	1010	956	982	1100	1060	1080	1140	1130	1140
30	1050	1000	1030	988	944	968	1120	1080	1100	1140	1120	1130
31	---	---	---	968	946	956	1130	1090	1110	---	---	---
MONTH	1060	908	998	1050	940	983	1240	948	1060	1330	1060	1160
YEAR	1330	313	957									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	24.0	20.5	22.5	18.5	14.0	16.5	12.5	11.0	12.0	10.0	9.0	9.5
2	23.5	20.5	22.5	18.0	13.0	15.5	12.0	11.0	11.5	9.0	8.5	9.0
3	23.0	20.0	21.5	18.5	12.5	15.5	11.5	10.5	11.0	9.0	8.5	9.0
4	23.0	20.0	22.0	19.5	13.0	16.5	11.0	10.0	10.5	9.0	8.5	9.0
5	22.5	20.0	21.5	18.0	14.0	16.0	11.0	10.0	10.5	10.0	9.0	9.5
6	23.0	20.0	21.5	19.5	13.5	16.5	10.0	9.0	9.5	10.5	9.5	10.0
7	23.0	20.0	21.5	20.0	14.0	17.0	9.0	7.5	8.0	10.5	10.0	10.0
8	23.0	19.5	21.5	19.5	13.5	16.5	7.5	6.5	7.5	10.5	10.0	10.0
9	23.0	19.0	21.0	18.5	14.5	16.5	7.5	6.5	7.0	10.5	10.0	10.0
10	23.0	19.0	21.0	17.5	15.5	16.5	9.0	7.0	8.0	10.0	10.0	10.0
11	23.5	18.0	21.0	15.0	12.5	14.0	10.5	9.0	10.0	11.0	10.0	10.5
12	23.0	17.0	20.5	12.5	11.0	11.5	11.0	10.0	10.5	11.5	11.0	11.0
13	23.5	17.5	20.5	12.0	11.5	11.5	11.0	10.0	11.0	12.0	11.0	11.5
14	23.0	19.0	21.0	12.5	11.5	11.5	11.5	10.5	11.0	11.5	11.5	11.5
15	22.5	17.5	20.5	13.0	11.5	12.0	11.5	10.0	10.5	11.5	11.0	11.5
16	21.5	17.0	19.5	12.5	11.0	11.5	10.5	9.5	10.0	11.5	11.0	11.0
17	21.5	17.5	19.5	12.5	11.5	12.0	11.5	10.0	11.0	11.5	11.0	11.0
18	21.5	17.0	19.5	13.0	12.0	12.5	11.5	11.0	11.5	11.5	11.0	11.0
19	21.0	16.5	19.0	13.5	12.0	12.5	11.5	10.0	11.0	11.5	11.0	11.5
20	22.0	19.0	20.5	14.0	13.0	13.5	10.5	10.0	10.0	11.0	10.5	11.0
21	21.5	18.5	19.5	14.5	13.5	14.0	10.0	9.5	9.5	11.0	10.5	11.0
22	22.0	18.0	20.0	13.0	12.0	12.5	9.5	9.0	9.0	11.0	11.0	11.0
23	19.5	16.5	18.0	13.0	12.0	12.5	9.5	9.0	9.0	11.0	11.0	11.0
24	20.5	16.0	18.5	13.5	13.0	13.0	10.0	9.0	9.5	11.5	11.0	11.0
25	21.0	18.0	19.0	13.5	12.5	13.0	10.0	9.5	9.5	11.5	11.0	11.0
26	21.0	16.5	19.0	13.0	12.0	12.5	10.0	9.5	9.5	11.0	10.5	10.5
27	21.0	15.5	18.5	13.0	12.0	12.5	10.0	9.5	10.0	10.5	10.0	10.0
28	20.5	15.5	18.0	12.0	11.0	11.5	10.0	9.5	10.0	10.0	9.5	9.5
29	20.5	17.5	19.0	12.0	11.0	11.5	10.0	10.0	10.0	9.5	8.5	9.0
30	18.5	17.0	17.5	12.0	11.0	11.5	10.5	10.0	10.0	8.5	8.5	8.5
31	19.5	15.0	17.0	---	---	---	10.5	10.0	10.0	8.5	8.0	8.5
MONTH	24.0	15.0	20.0	20.0	11.0	13.5	12.5	6.5	10.0	12.0	8.0	10.5

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.5	8.0	8.5	13.0	12.5	12.5	13.0	13.0	13.0	16.5	16.0	16.0
2	8.5	8.0	8.0	13.0	12.5	13.0	13.5	13.0	13.0	16.5	15.0	16.0
3	10.0	8.5	9.0	13.0	12.5	13.0	14.0	13.0	13.5	20.5	15.0	17.0
4	10.0	9.0	9.5	13.5	13.0	13.0	13.5	13.0	13.5	20.5	15.0	16.5
5	9.5	9.0	9.0	13.0	12.5	13.0	13.5	13.5	13.5	16.5	16.0	16.5
6	9.0	9.0	9.0	13.0	12.5	12.5	13.5	13.5	13.5	17.0	16.5	16.5
7	9.5	9.0	9.0	13.0	12.5	13.0	14.0	13.5	13.5	17.0	16.5	16.5
8	10.0	9.0	9.5	13.0	13.0	13.0	14.0	13.5	14.0	17.0	16.5	17.0
9	9.5	9.0	9.5	13.5	13.0	13.0	14.0	14.0	14.0	17.5	16.5	17.0
10	10.0	9.5	9.5	13.5	13.0	13.0	14.0	14.0	14.0	17.5	16.5	17.0
11	10.0	9.5	10.0	13.5	13.0	13.5	14.0	14.0	14.0	18.0	16.5	17.5
12	10.5	9.5	10.0	13.5	13.0	13.5	14.5	14.0	14.0	18.0	17.5	17.5
13	10.5	10.0	10.0	13.5	13.0	13.5	14.5	14.0	14.5	18.0	17.5	17.5
14	10.5	10.0	10.0	13.5	13.5	13.5	15.0	14.5	14.5	18.0	17.5	17.5
15	11.0	10.0	10.5	14.0	13.5	14.0	15.0	14.5	14.5	18.0	17.5	17.5
16	10.5	10.5	10.5	14.5	13.5	14.0	15.0	14.5	15.0	18.0	17.5	17.5
17	11.0	10.5	11.0	15.0	14.0	14.5	15.0	14.5	15.0	18.0	17.5	17.5
18	11.5	11.0	11.5	15.0	14.5	14.5	15.0	14.5	15.0	---	17.5	18.0
19	12.0	11.0	11.5	15.5	15.0	15.0	15.5	15.0	15.0	18.0	17.5	18.0
20	12.0	11.0	12.0	15.5	15.0	15.0	15.5	15.0	15.5	18.0	17.5	17.5
21	12.0	11.0	11.5	15.0	14.0	14.5	15.5	15.5	15.5	18.0	18.0	18.0
22	12.5	12.0	12.0	14.5	14.0	14.0	16.0	15.5	16.0	18.0	18.0	18.0
23	12.0	11.5	12.0	14.0	13.5	13.5	16.0	16.0	16.0	18.5	18.0	18.0
24	12.5	12.0	12.0	14.0	13.5	13.5	16.0	16.0	16.0	18.5	18.0	18.5
25	12.5	12.0	12.0	14.0	13.5	13.5	16.0	16.0	16.0	19.0	18.5	18.5
26	12.5	12.0	12.5	14.0	13.5	13.5	16.0	16.0	16.0	19.0	18.5	18.5
27	12.5	12.0	12.5	14.0	13.5	13.5	16.0	16.0	16.0	19.0	18.5	18.5
28	13.0	12.0	12.5	14.0	13.5	14.0	16.0	16.0	16.0	19.0	18.5	18.5
29	---	---	---	14.5	14.0	14.0	16.0	16.0	16.0	19.0	18.5	18.5
30	---	---	---	14.5	14.0	14.0	16.5	16.0	16.0	19.0	18.5	18.5
31	---	---	---	14.0	13.0	14.0	---	---	---	19.0	18.5	19.0
MONTH	13.0	8.0	10.5	15.5	12.5	13.5	16.5	13.0	14.5	20.5	15.0	17.5

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.0	19.0	19.0	22.0	21.5	21.5	23.5	0.5	21.5	26.0	19.5	22.5
2	19.0	19.0	19.0	22.0	21.5	22.0	23.5	23.5	23.5	26.5	18.0	22.0
3	19.5	19.0	19.5	22.5	22.0	22.0	24.0	23.5	23.5	26.5	18.5	22.5
4	20.0	19.5	19.5	22.0	22.0	22.0	23.5	23.5	23.5	26.5	18.0	22.0
5	20.0	19.5	19.5	22.0	22.0	22.0	23.5	23.5	23.5	26.5	18.5	22.5
6	19.5	19.5	19.5	22.0	22.0	22.0	24.0	23.5	23.5	23.5	22.0	22.5
7	20.0	19.5	19.5	22.0	22.0	22.0	24.0	23.5	23.5	22.5	21.5	22.5
8	25.0	18.0	19.5	22.0	22.0	22.0	24.0	23.5	24.0	21.5	20.5	23.5
9	20.0	19.0	19.5	22.0	21.5	22.0	24.0	24.0	24.0	20.5	20.0	23.5
10	20.0	19.5	20.0	22.0	21.5	22.0	24.0	24.0	24.0	20.0	19.5	23.5
11	20.5	20.0	20.0	22.0	22.0	22.0	24.0	24.0	24.0	20.0	18.5	23.5
12	20.0	20.0	20.0	22.5	22.0	22.5	24.0	23.0	23.0	27.0	1.5	23.5
13	20.0	20.0	20.0	22.5	22.0	22.5	23.0	21.5	22.0	27.0	20.5	23.5
14	20.5	20.0	20.0	22.5	22.0	22.5	25.5	19.0	22.0	28.0	21.5	24.5
15	20.5	20.0	20.0	23.0	22.0	22.5	25.5	19.0	22.0	28.0	20.5	24.0
16	20.5	20.0	20.0	23.0	22.5	22.5	25.5	18.5	22.0	27.0	18.0	22.0
17	20.5	20.0	20.0	23.0	22.5	22.5	26.5	20.0	22.5	26.0	19.0	22.5
18	20.5	20.0	20.5	30.0	22.5	23.0	26.5	21.0	23.0	26.0	19.0	22.0
19	20.5	20.5	20.5	23.0	22.5	23.0	25.5	21.0	22.5	25.5	19.0	22.0
20	20.5	20.5	20.5	23.0	23.0	23.0	25.5	20.5	22.5	26.0	18.5	22.0
21	21.0	20.5	20.5	23.5	23.0	23.0	26.5	18.5	21.5	25.0	19.0	22.0
22	21.0	20.5	21.0	23.5	23.0	23.5	27.0	18.0	22.0	26.0	19.5	22.5
23	21.0	21.0	21.0	23.5	23.5	23.5	27.0	18.0	22.5	25.5	19.0	22.0
24	21.0	20.5	21.0	23.5	23.5	23.5	27.0	18.5	22.5	24.0	20.0	22.0
25	21.0	20.5	21.0	23.5	23.5	23.5	27.0	19.0	22.5	25.0	19.0	21.5
26	21.5	21.0	21.0	24.0	23.5	23.5	26.5	19.0	22.5	24.0	18.0	21.0
27	21.5	21.0	21.0	24.0	23.5	24.0	27.0	19.5	23.0	23.5	18.0	20.5
28	21.5	21.0	21.5	24.0	23.5	23.5	24.5	20.5	22.0	23.5	18.5	21.0
29	21.5	21.5	21.5	23.5	23.5	23.5	23.0	20.0	21.5	23.5	18.5	20.5
30	22.0	21.5	21.5	23.5	23.5	23.5	26.5	20.0	22.5	23.0	18.0	20.0
31	---	---	---	24.0	21.5	23.5	26.5	18.5	22.0	---	---	---
MONTH	25.0	18.0	20.0	30.0	21.5	22.5	27.0	0.5	22.5	28.0	1.5	22.5
YEAR	30.0	0.5	16.5									

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	203	80	44	178	114	55	122	25	8.2
2	208	100	56	183	110	54	124	25	8.4
3	210	110	62	186	110	55	124	25	8.4
4	213	123	71	182	110	54	125	25	8.4
5	214	120	69	185	110	55	126	25	8.5
6	216	120	70	183	110	54	126	25	8.5
7	218	120	71	181	110	54	125	25	8.4
8	219	120	71	160	110	48	124	25	8.4
9	218	120	71	157	110	47	122	25	8.2
10	251	120	81	175	110	52	121	25	8.2
11	230	120	75	250	170	115	124	20	6.7
12	221	120	72	309	200	167	128	20	6.9
13	218	120	71	220	160	95	129	20	7.0
14	218	120	71	171	120	55	131	20	7.1
15	217	120	70	144	90	35	132	20	7.1
16	218	120	71	126	90	31	135	20	7.3
17	223	120	72	126	80	27	143	20	7.7
18	215	120	70	125	80	27	155	20	8.4
19	175	120	57	123	70	23	204	88	55
20	171	120	55	122	70	23	239	140	90
21	174	120	56	122	60	20	203	69	42
22	176	120	57	126	60	20	164	50	22
23	164	120	53	126	50	17	162	50	22
24	168	121	55	126	50	17	162	40	17
25	174	120	56	126	40	14	162	40	17
26	178	120	58	126	40	14	159	30	13
27	176	120	57	122	30	9.9	157	30	13
28	177	115	55	116	30	9.4	157	30	13
29	180	115	56	118	27	8.6	157	20	8.5
30	180	115	56	122	25	8.2	157	20	8.5
31	189	115	59	---	---	---	157	20	8.5
TOTAL	6212	---	1968	4716	---	1264.1	4556	---	471.3

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	146	20	7.9	297	205	164	191	10	5.2
2	146	19	7.5	303	175	143	174	8	3.8
3	140	20	7.6	286	115	89	174	8	3.8
4	140	20	7.6	262	70	50	174	8	3.8
5	146	25	9.9	278	70	53	174	8	3.8
6	342	78	106	300	60	49	172	8	3.7
7	580	210	329	264	60	43	194	8	4.2
8	566	150	229	224	60	36	206	7	3.9
9	421	105	127	235	60	38	188	7	3.6
10	172	60	28	217	50	29	177	7	3.3
11	347	78	83	215	50	29	179	7	3.4
12	433	85	99	214	45	26	179	7	3.4
13	420	60	68	215	44	26	177	7	3.3
14	417	45	51	214	44	25	172	30	14
15	410	36	40	212	44	25	177	16	7.6
16	412	35	39	212	44	25	174	6	2.8
17	403	35	38	209	40	23	172	6	2.8
18	408	35	39	209	35	20	172	7	3.3
19	333	39	35	209	30	17	174	7	3.3
20	283	40	31	209	27	15	172	8	3.7
21	279	40	30	211	25	14	172	10	4.6
22	279	40	30	215	25	15	172	15	7.0
23	316	40	34	217	20	12	169	20	9.1
24	339	45	41	217	20	12	169	24	11
25	337	45	41	217	15	8.8	169	20	9.1
26	292	45	35	216	15	8.7	169	20	9.1
27	263	45	32	215	15	8.7	174	20	9.4
28	262	45	32	215	16	9.3	179	20	9.7
29	258	48	33	---	---	---	182	20	9.8
30	258	45	31	---	---	---	199	16	8.6
31	278	101	77	---	---	---	215	20	12
TOTAL	9826	---	1798.5	6507	---	1013.5	5541	---	186.1

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	218	20	12	251	12	8.1	191	10	5.2
2	220	20	12	154	9	3.7	191	10	5.2
3	220	20	12	12	9	.29	191	10	5.2
4	249	24	16	80	9	1.9	191	10	5.2
5	265	19	14	198	9	4.8	194	11	5.8
6	271	15	11	197	8	4.3	194	11	5.8
7	265	15	11	222	8	4.8	124	11	3.7
8	268	15	11	235	8	5.1	69	11	2.0
9	268	14	10	191	7	3.6	185	11	5.5
10	268	15	11	116	9	2.8	185	11	5.5
11	261	15	11	157	11	4.7	182	11	5.4
12	265	15	11	197	11	5.9	182	11	5.4
13	265	15	11	197	12	6.4	182	11	5.4
14	265	15	11	197	12	6.4	209	11	6.2
15	261	15	11	185	12	6.0	226	11	6.7
16	299	15	12	200	10	5.4	226	11	6.7
17	324	15	13	197	10	5.3	226	11	6.7
18	320	15	13	197	10	5.3	238	11	7.1
19	316	13	11	197	10	5.3	251	11	7.5
20	285	12	9.2	197	10	5.3	251	11	7.5
21	265	12	8.6	197	10	5.3	254	12	8.2
22	265	11	7.9	197	10	5.3	258	12	8.4
23	265	10	7.2	197	10	5.3	258	12	8.4
24	268	9	6.5	197	10	5.3	258	12	8.4
25	268	12	8.7	194	11	5.8	258	12	8.4
26	265	12	8.6	194	11	5.8	251	13	8.8
27	265	12	8.6	194	11	5.8	251	12	8.1
28	265	12	8.6	194	11	5.8	251	11	7.5
29	265	12	8.6	194	11	5.8	251	10	6.8
30	261	12	8.5	194	11	5.8	251	10	6.8
31	---	---	---	203	11	6.0	---	---	---
TOTAL	8025	---	315.0	5732	---	157.39	6429	---	193.5

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	251	10	6.8	275	15	11	75	350	71
2	271	10	7.3	275	15	11	75	350	71
3	288	11	8.6	271	15	11	73	350	69
4	282	11	8.4	271	15	11	75	350	71
5	282	11	8.4	268	15	11	84	346	78
6	282	11	8.4	265	15	11	69	350	65
7	282	11	8.4	261	15	11	69	360	67
8	278	11	8.3	268	60	44	68	360	66
9	278	11	8.3	271	80	59	66	370	66
10	278	11	8.3	261	70	49	63	370	63
11	275	11	8.2	254	60	41	65	380	67
12	275	12	8.9	238	55	35	66	385	69
13	271	12	8.8	226	55	34	71	380	73
14	271	12	8.8	133	70	25	82	370	82
15	268	12	8.7	92	210	52	95	360	92
16	268	12	8.7	86	370	86	75	350	71
17	265	12	8.6	86	400	93	76	340	70
18	265	15	11	82	420	93	79	330	70
19	261	15	11	88	430	102	77	320	67
20	261	15	11	86	440	102	76	310	64
21	261	20	14	90	455	111	64	300	52
22	261	20	14	88	450	107	65	300	52
23	282	20	15	82	440	97	65	300	53
24	295	25	20	78	430	91	67	290	52
25	295	25	20	78	420	88	67	290	52
26	295	25	20	76	410	84	67	280	51
27	292	33	26	75	400	81	66	280	50
28	288	30	23	88	390	93	66	270	47
29	285	25	19	84	380	86	70	270	50
30	282	20	15	84	370	84	70	260	48
31	278	17	13	82	360	80	---	---	---
TOTAL	8566	---	373.9	4962	---	1894	2146	---	1919
YEAR	73218.0		11554.29						

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPER-ATURE, WATER (DEG C)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM
OCT							
04...	1100	20.5	211	123	70	--	--
24...	1315	18.0	176	121	57	--	--
NOV							
01...	1055	14.0	184	114	57	--	--
29...	1240	12.5	114	27	8.3	--	--
DEC							
19...	1500	10.5	239	154	99	--	--
JAN							
02...	1115	9.0	152	19	7.8	--	--
19...	1225	12.0	278	39	29	--	--
FEB							
01...	1000	--	299	213	172	86	95
28...	1415	12.5	216	16	9.3	--	--
MAR							
14...	1300	14.0	177	30	14	--	--
APR							
05...	1015	13.5	267	19	14	--	--
25...	1430	16.5	262	12	8.5	--	--
MAY							
01...	1145	16.5	249	12	8.1	--	--
09...	1130	17.0	233	7	4.4	--	--
18...	1415	--	209	10	5.6	--	--
31...	1450	--	204	11	6.1	--	--
JUN							
26...	1045	21.0	257	15	10	--	--
JUL							
03...	0950	21.5	282	11	8.4	--	--
12...	0930	22.0	281	12	9.1	--	--
17...	1300	--	265	12	8.6	--	--
18...	1120	22.0	261	15	11	--	--
AUG							
21...	0920	19.0	101	455	124	49	66

DATE	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM
OCT							
04...	--	--	--	--	68	--	--
24...	--	--	--	--	90	--	--
NOV							
01...	--	--	--	--	93	99	100
29...	--	--	--	--	87	--	--
DEC							
19...	--	--	--	--	97	--	--
JAN							
02...	--	--	--	--	93	--	--
19...	--	--	--	--	90	--	--
FEB							
01...	96	96	97	100	--	--	--
28...	--	--	--	--	86	--	--
MAR							
14...	--	--	--	--	97	100	--
APR							
05...	--	--	--	--	92	100	--
25...	--	--	--	--	74	--	--
MAY							
01...	--	--	--	--	78	--	--
09...	--	--	--	--	--	93	100
18...	--	--	--	--	82	--	--
31...	--	--	--	--	76	--	--
JUN							
26...	--	--	--	--	81	--	--
JUL							
03...	--	--	--	--	72	--	--
12...	--	--	--	--	75	--	--
17...	--	--	--	--	78	--	--
18...	--	--	--	--	83	--	--
AUG							
21...	80	93	99	100	--	--	--

11075600 SANTA ANA RIVER AT IMPERIAL HIGHWAY, NEAR ANAHEIM, CA

LOCATION.--Lat 33°51'23", long 117°47'23", in Canon De Santa Ana, Orange County, Hydrologic Unit 18070203, on right bank 500 ft (150 m) upstream from State Highway 91, and 0.4 mi (0.6 km) south of Orangethorpe Avenue, and 9 mi (14 km) east of Anaheim, and 9.8 mi (15.8 km) downstream from Prado Dam.

DRAINAGE AREA.--1,544 mi^2 (3,999 km^2), excludes 768 mi^2 (1,989 km^2) above Lake Elsinore.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 282 ft (86.0 m), from topographic map. Prior to June 4, 1975, at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records poor. Record based on correlation with upstream station (11074000) due to construction in channel. Natural flow affected by ground-water withdrawals, diversions, importation from Metropolitan Water District and California Aqueduct, municipal use, return flow from irrigation, Prado flood-control reservoir, capacity, 201,200 acre-ft (248 hm^3) since 1940. See schematic diagram of Santa Ana River Basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft^3/s (113 m^3/s) Mar. 4, 1978, estimated; gage height unknown, maximum gage height, 5.22 ft (1.591 m) Dec. 4, 1974, datum then in use; minimum daily discharge, 10 ft^3/s (0.28 m^3/s) Sept. 20, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 660 ft^3/s (18.7 m^3/s) Jan. 7, estimated, gage height unknown, minimum daily, 16 ft^3/s (0.45 m^3/s) May 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	201	178	119	160	350	214	208	250	207	265	285	84
2	207	183	117	153	310	197	212	186	200	272	285	84
3	210	186	115	147	290	188	215	16	200	285	265	84
4	212	183	114	152	270	185	242	144	203	290	278	85
5	213	186	115	200	274	187	276	199	203	288	272	87
6	213	183	117	450	305	188	300	199	203	283	265	84
7	213	178	118	660	272	206	300	217	170	280	258	72
8	221	167	119	620	253	217	300	235	116	280	272	71
9	211	160	120	420	245	200	300	255	193	278	285	70
10	251	175	120	170	238	188	298	160	192	275	278	66
11	238	250	122	440	230	186	298	190	192	275	258	69
12	224	310	128	430	230	188	298	217	195	273	265	74
13	220	250	129	420	230	182	296	214	280	271	217	82
14	217	180	130	415	230	181	297	210	218	270	141	90
15	215	150	135	413	230	181	300	208	235	270	89	105
16	220	128	140	410	230	183	330	212	238	268	95	81
17	223	125	143	413	227	182	340	208	240	268	95	79
18	215	125	168	385	227	181	342	208	248	266	98	81
19	175	124	200	330	228	183	340	208	243	266	98	83
20	171	123	235	295	230	190	320	208	255	265	102	81
21	174	124	220	283	400	192	290	208	255	265	108	75
22	178	126	187	287	265	192	280	210	255	265	103	68
23	166	128	172	310	230	185	280	210	253	295	99	68
24	168	128	168	350	230	185	280	212	251	319	93	70
25	178	128	168	330	230	188	280	208	250	319	89	71
26	178	127	167	290	230	192	279	207	250	312	89	70
27	176	124	167	275	230	195	278	205	248	299	92	68
28	177	119	167	265	226	199	275	205	250	299	97	68
29	181	120	166	263	---	202	272	205	250	299	95	71
30	180	120	165	262	---	206	268	207	255	299	92	74
31	189	---	165	450	---	208	---	210	---	285	92	---
TOTAL	6215	4788	4616	10446	7145	5951	8594	6231	6668	8744	5270	2317
MEAN	200	160	149	337	255	192	286	201	222	282	170	77.2
MAX	251	310	235	660	400	217	342	255	255	319	285	105
MIN	166	119	114	147	226	181	208	16	116	265	89	66
AC-FT	12330	9500	9160	20720	14170	11800	17050	12360	13230	17340	10450	4600

CAL YR 1978 TOTAL 163605 MEAN 448 MAX 3200 MIN 10 AC-FT 324500
WTR YR 1979 TOTAL 76987 MEAN 211 MAX 660 MIN 16 AC-FT 152700

11075600 SANTA ANA RIVER AT IMPERIAL HIGHWAY, NEAR ANAHEIM, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to 1979 (discontinued).
SEDIMENT RECORDS: October 1977 to September 1979 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1972 to September 1979.
SEDIMENT RECORDS: October 1972 to September 1979.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 6,870 mg/L Feb. 11, 1973; minimum daily mean, 14 mg/L Mar. 12, 1979.
SEDIMENT DISCHARGE: Maximum daily, 22,400 tons (20,300 metric tons) Jan. 8, 1974; minimum daily, 0.01 tons (0.01 metric tons) on several days in 1973.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily, 6,000 mg/L Jan. 5; minimum daily, 14 mg/L Mar. 12.
SEDIMENT DISCHARGE: Maximum daily, 3,240 tons (2,940 metric tons) Jan. 5; minimum daily, 1.5 tons (1.4 metric tons) May 3.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	---	10.0	11.0	---	---	---	21.5		---	---
2		---	---	---	---	12.0	---	---	---		---	27.0
3		17.0	11.5	10.5	---	---	19.0	---	---		---	---
4		---	---	11.0	---	---	19.0	---	---		---	---
5		---	---	10.0	---	18.0	---	---	---		---	21.5
6		---	---	12.0	---	19.0	18.5	---	---		---	---
7		---	---	---	---	---	---	---	---		---	26.0
8		---	---	---	---	---	---	---	---		---	---
9		---	---	---	---	16.0	---	---	---		---	26.0
10		---	---	---	---	---	18.0	---	---		---	---
11		---	---	13.0	---	---	19.0	---	---		---	---
12		---	---	---	---	19.0	---	---	---		---	26.0
13		---	14.0	---	---	---	---	---	---		---	---
14		---	---	12.0	---	---	21.0	---	---		---	---
15		---	---	---	14.0	16.0	---	---	---		26.0	26.0
16		---	---	11.0	12.5	17.0	---	---	---		26.0	26.0
17		---	11.0	---	14.5	---	19.5	17.0	---		---	---
18		---	11.5	---	---	---	---	---	---		---	---
19		---	---	---	---	---	---	---	---		---	---
20		---	---	13.0	13.0	16.0	---	---	---		24.0	26.0
21		---	12.0	11.0	13.0	16.0	---	19.5	---		---	---
22		---	8.0	---	15.5	19.0	---	---	---		---	---
23		---	---	13.0	---	---	---	---	---		---	25.0
24		---	10.0	---	---	---	---	---	---		---	---
25		---	---	---	---	---	---	---	---		25.0	---
26		---	12.0	12.5	---	---	---	---	---		---	25.0
27		---	12.0	---	---	---	---	---	---		---	---
28		---	---	---	---	---	---	---	---		26.0	20.0
29		---	---	---	---	---	---	20.0	---		---	---
30		---	---	9.0	---	17.5	---	---	---		---	---
31		---	---	9.0	---	---	---	---	---		26.0	---
MONTH		---	---	---	---	---	---	---	---		---	---

11075600 SANTA ANA RIVER AT IMPERIAL HIGHWAY, NEAR ANAHEIM, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	201	380	206	178	110	53	119	30	9.6
2	207	360	201	183	105	52	117	30	9.5
3	210	340	193	186	100	50	115	28	8.7
4	212	320	183	183	100	49	114	28	8.6
5	213	300	173	186	90	45	115	28	8.7
6	213	290	167	183	90	44	117	28	8.8
7	213	280	161	178	85	41	118	28	8.9
8	221	270	161	167	85	38	119	28	9.0
9	211	260	148	160	80	35	120	28	9.1
10	251	250	169	175	110	52	120	29	9.4
11	238	240	154	250	300	203	122	31	10
12	224	230	139	310	500	419	128	33	11
13	220	220	131	250	200	135	129	37	13
14	217	210	123	180	120	58	130	50	18
15	215	210	122	150	80	32	135	70	26
16	220	200	119	128	65	22	140	100	38
17	223	190	114	125	60	20	143	156	60
18	215	180	104	125	55	19	168	800	363
19	175	170	80	124	50	17	200	1500	810
20	171	170	78	123	50	17	235	500	317
21	174	160	75	124	50	17	220	194	115
22	178	160	77	126	45	15	187	108	55
23	166	150	67	128	45	16	172	90	42
24	168	150	68	128	40	14	168	81	37
25	178	140	67	128	40	14	168	60	27
26	178	140	67	127	40	14	167	41	18
27	176	130	62	124	35	12	167	37	17
28	177	130	62	119	35	11	167	37	17
29	181	120	59	120	35	11	166	37	17
30	180	120	58	120	30	9.7	165	45	20
31	189	110	56	---	---	---	165	50	22
TOTAL	6215	---	3644	4788	---	1534.7	4616	---	2143.3

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	160	53	23	350	816	771	214	70	40
2	153	45	19	310	700	586	197	62	33
3	147	42	17	290	600	470	188	52	26
4	152	35	14	270	550	401	185	43	21
5	200	6000	3240	279	480	362	187	35	18
6	450	2200	2670	305	420	346	188	26	13
7	660	1200	2140	272	370	272	206	24	13
8	620	800	1340	253	320	219	217	23	13
9	420	450	510	245	290	192	200	21	11
10	170	300	138	238	250	161	188	19	9.6
11	440	542	644	230	220	137	186	16	8.0
12	430	560	650	230	190	118	188	14	7.1
13	420	570	646	230	170	106	182	25	12
14	415	582	652	230	150	93	181	60	29
15	413	450	502	230	132	82	181	110	54
16	410	341	377	230	76	47	183	31	15
17	413	350	390	227	67	41	182	70	34
18	385	360	374	227	55	34	181	200	98
19	330	380	339	228	45	28	183	1000	494
20	295	381	303	230	36	22	190	1170	600
21	283	365	279	400	2000	2160	192	185	96
22	287	250	194	265	158	113	192	134	69
23	310	168	141	230	140	87	185	130	65
24	350	130	123	230	120	75	185	135	67
25	330	100	89	230	110	68	188	160	81
26	290	71	56	230	100	62	192	190	98
27	275	70	52	230	90	56	195	210	111
28	265	70	50	226	80	49	199	225	121
29	263	70	50	---	---	---	202	230	125
30	262	73	52	---	---	---	206	230	128
31	450	1000	1220	---	---	---	208	220	124
TOTAL	10448	---	17294	7145	---	7158	5951	---	2633.7

11075600 SANTA ANA RIVER AT IMPERIAL HIGHWAY, NEAR ANAHEIM, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	208	200	112	250	37	25	207	19	11
2	212	190	109	186	36	18	200	20	11
3	215	179	104	16	35	1.5	200	20	11
4	242	253	165	144	34	13	203	20	11
5	276	200	149	199	34	18	203	20	11
6	300	154	125	199	33	18	203	20	11
7	300	150	122	217	32	19	170	20	9.2
8	300	140	113	235	32	20	116	21	6.6
9	300	130	105	255	32	22	193	21	11
10	298	122	98	160	31	13	192	22	11
11	298	157	126	190	31	16	192	22	11
12	298	130	105	217	30	16	195	23	12
13	296	100	80	214	29	17	200	24	13
14	297	79	63	210	29	16	218	25	15
15	300	70	57	208	29	16	235	26	16
16	330	60	53	212	28	16	238	27	17
17	340	57	52	208	28	16	240	28	18
18	342	54	50	208	28	16	248	29	19
19	340	52	48	208	27	15	243	30	20
20	320	50	43	208	27	15	255	32	22
21	290	48	38	208	26	15	255	33	23
22	280	47	36	210	25	14	255	35	24
23	280	45	34	210	24	14	253	37	25
24	280	44	33	212	23	13	251	39	26
25	280	42	32	208	22	12	250	40	27
26	279	41	31	207	21	12	250	43	29
27	278	40	30	205	20	11	248	45	30
28	275	39	29	205	19	11	250	47	32
29	272	38	28	205	19	11	250	49	33
30	268	37	27	207	19	11	255	50	34
31	---	---	---	210	19	11	---	---	---
TOTAL	8594	---	2197	6231	---	461.5	6668	---	549.8

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	265	51	36	285	34	26	84	400	91
2	272	52	38	285	33	25	84	322	73
3	285	52	40	285	33	25	84	310	70
4	290	52	41	278	33	25	85	300	69
5	288	52	40	272	33	24	87	295	69
6	283	52	40	265	33	24	84	320	73
7	280	52	39	258	33	23	72	347	67
8	280	51	39	272	33	24	71	320	61
9	278	51	38	285	33	25	70	298	56
10	275	51	38	278	33	25	68	320	59
11	275	50	37	258	33	23	69	340	63
12	273	49	36	265	34	24	74	368	74
13	271	48	35	217	37	22	82	360	80
14	270	47	34	141	100	38	90	340	83
15	270	46	34	89	558	134	105	332	94
16	268	45	33	95	523	134	81	309	68
17	268	44	32	95	520	133	79	308	66
18	266	42	30	98	530	140	81	307	67
19	266	41	29	98	680	180	83	306	69
20	265	40	29	102	713	196	81	306	67
21	265	40	29	108	523	153	75	306	62
22	265	39	28	103	500	139	68	307	56
23	295	38	30	99	500	134	68	307	56
24	319	37	32	93	530	133	70	310	59
25	319	37	32	89	550	132	71	315	60
26	312	36	30	89	560	135	70	316	60
27	299	35	28	92	570	142	68	400	73
28	299	35	28	97	571	150	68	530	97
29	299	35	28	95	560	144	71	450	86
30	299	34	27	92	540	134	74	430	86
31	285	34	26	92	525	130	---	---	---
TOTAL	8744	---	1036	5270	---	2796	2317	---	2114
YEAR	76987.0		43562.0						

11075600 SANTA ANA RIVER AT IMPERIAL HIGHWAY, NEAR ANAHEIM, CA--Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1978	6215.00	3644.00	4700	8340
NOVEMBER ...	4788.00	1534.70	2900	4440
DECEMBER ...	4616.00	2143.30	2440	4580
JANUARY 1979	10448.00	17294.00	16200	33500
FEBRUARY ...	7145.00	7158.00	7350	14500
MARCH	5951.00	2633.70	4210	6850
APRIL	8594.00	2197.00	9940	12100
MAY	6231.00	461.50	4900	5360
JUNE	6668.00	549.80	5790	6340
JULY	8744.00	1036.00	9810	10800
AUGUST	5270.00	2796.00	4220	7020
SEPTEMBER ..	2317.00	2114.00	431	2540
TOTAL	76987.00	43562.00	72891	116370

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM
NOV										
03...	1200	17.0	250	100	67	--	--	--	--	--
DEC										
03...	1030	11.5	115	28	8.7	--	--	--	--	--
18...	1600	11.5	168	1400	635	--	53	64	74	82
21...	1500	12.0	220	194	115	--	--	--	--	--
JAN										
03...	1200	10.5	147	48	19	--	--	--	--	--
08...	1445	11.5	177	513	245	46	53	55	59	65
30...	1230	9.0	255	73	50	--	--	--	--	--
31...	1045	9.0	358	1640	1590	--	--	--	--	--
FEB										
21...	1130	13.0	500	2800	3780	--	47	61	74	85
MAR										
02...	0915	12.0	196	63	33	--	--	--	--	--
APR										
06...	1320	18.5	296	160	128	--	--	--	--	--
MAY										
17...	0930	17.0	193	28	15	--	--	--	--	--
JUN										
01...	1230	21.5	206	19	11	--	--	--	--	--
07...	0945	--	196	20	11	--	--	--	--	--
25...	1230	--	199	40	21	--	--	--	--	--
27...	0845	--	247	45	30	--	--	--	--	--
JUL										
10...	1210	--	271	51	37	--	--	--	--	--
31...	1020	--	284	34	26	--	--	--	--	--
AUG										
21...	1130	--	118	523	167	38	51	60	69	72
SEP										
05...	0815	21.5	86	295	68	--	--	--	--	--
28...	0920	20.0	68	530	97	35	46	58	70	83

11075600 SANTA ANA RIVER AT IMPERIAL HIGHWAY, NEAR ANAHEIM, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
NOV									
03...	--	90	--	--	--	--	--	--	--
DEC									
03...	--	73	--	--	--	--	--	--	--
18...	86	--	93	--	100	--	--	--	--
21...	--	66	--	--	--	--	--	--	--
JAN									
03...	--	75	--	--	--	--	--	--	--
08...	--	70	--	76	--	87	95	99	100
30...	--	69	--	--	--	--	--	--	--
31...	--	72	--	--	--	--	--	--	--
FEB									
21...	--	94	--	99	--	100	--	--	--
MAR									
02...	--	70	--	82	--	92	97	100	--
APR									
06...	--	45	--	61	--	85	99	100	--
MAY									
17...	--	76	--	--	--	--	--	--	--
JUN									
01...	--	85	--	--	--	--	--	--	--
07...	--	67	--	--	--	--	--	--	--
25...	--	57	--	--	--	--	--	--	--
27...	--	53	--	--	--	--	--	--	--
JUL									
10...	--	41	--	--	--	--	--	--	--
31...	--	44	--	--	--	--	--	--	--
AUG									
21...	--	73	--	75	--	78	84	94	100
SEP									
05...	--	95	--	--	--	--	--	--	--
28...	--	96	--	99	--	100	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPERATURE, WATER (DEG C)	NUMBER OF SAMPLING POINTS	STREAMFLOW, INSTANTANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
SEP								
28...	0850	20.0	5	68	1	2	11	21

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
SEP							
28...	40	58	70	78	86	97	100

11075620 SANTA ANA RIVER SPREADING DIVERSION BELOW IMPERIAL HIGHWAY NEAR ANAHEIM, CA

LOCATION.--Lat 33°51'23", long 117°48'00", in Canon De Santa Ana, Orange County, Hydrologic Unit 1807020, on diversion channel, 100 ft (30 m) downstream from diversion point, 0.1 mi (0.2 km) south of La Palma Avenue, 0.6 mi (1.0 km) west of Imperial Highway, and 7.8 mi (12.6 km) east of Anaheim.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1974 to current year. Records prior to Sept. 30, 1976, in files of Laguna Niguel Subdistrict.

GAGE.--Water-stage recorder and Parshall flume control. Altitude of gage is 262 ft (80 m), from topographic map.

REMARKS.--Records fair. Water is diverted from Santa Ana River at diversion point 100 ft (30 m) upstream, for recharging to spreading basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 431 ft³/s (12.2 m³/s) Jan. 14, 1978; no flow for some periods in each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 361 ft³/s (10.2 m³/s) Jan. 15; no flow Dec. 13, Jan. 9, Sept. 20-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	225	168	.12	.57	58	137	183	192	143	179	203	66
2	224	167	.10	.17	64	107	182	155	144	186	200	66
3	229	166	.50	.09	33	93	186	39	147	199	198	64
4	218	163	.10	.13	43	90	206	37	149	199	195	64
5	219	164	.04	3.5	192	89	232	144	147	198	190	64
6	219	161	.04	9.0	247	87	222	146	147	196	187	66
7	220	160	.04	1.2	215	114	215	151	134	195	178	66
8	221	142	.04	.07	176	146	213	166	44	195	185	59
9	230	138	.04	0	183	146	208	157	131	190	191	52
10	250	148	.08	63	170	125	213	91	132	188	188	45
11	240	220	.08	214	166	124	213	98	130	187	180	46
12	230	250	.04	344	175	123	206	133	129	187	182	36
13	225	231	0	348	189	118	204	134	126	186	130	31
14	221	142	91	354	201	104	203	135	141	186	100	27
15	225	128	35	361	188	112	204	130	163	187	80	28
16	223	107	218	323	189	111	213	136	166	188	76	24
17	229	106	311	315	188	113	247	136	166	187	74	17
18	220	106	307	318	186	119	245	137	169	183	74	16
19	185	108	288	275	186	126	245	139	180	183	74	3.9
20	177	112	319	221	168	95	233	141	181	185	72	0
21	175	138	317	216	204	89	206	141	182	185	70	0
22	173	86	262	213	154	120	206	143	181	183	70	0
23	171	44	208	231	176	137	201	144	180	191	74	0
24	170	37	16	256	150	135	197	144	180	208	72	0
25	169	34	4.6	252	148	134	196	144	179	210	70	0
26	168	34	2.4	232	155	148	196	144	179	210	70	0
27	167	6.2	1.8	211	156	179	198	144	178	208	70	0
28	168	2.4	1.4	213	153	87	199	144	178	207	70	0
29	169	1.0	1.1	203	---	60	203	143	179	206	70	0
30	170	.44	.94	199	---	138	203	144	177	204	70	0
31	170	---	.77	59	---	185	---	143	---	203	66	---
TOTAL	6286	3470.04	2406.23	5435.73	4513	3691	6278	4175	4662	5999	3729	840.9
MEAN	203	116	77.6	175	161	119	209	135	155	194	120	28.0
MAX	250	250	319	361	247	185	247	192	182	210	203	66
MIN	167	.44	0	0	33	60	182	37	44	179	66	0
AC-FT	12470	6880	4770	10780	8950	7320	12450	8280	9250	11900	7400	1670

CAL YR 1978 TOTAL 69807.27 MEAN 191 MAX 431 MIN 0 AC-FT 138500
WTR YR 1979 TOTAL 51485.90 MEAN 141 MAX 361 MIN 0 AC-FT 102100

11075620 SANTA ANA RIVER SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL ANALYSES: Water years 1975 to current year.
SPECIFIC CONDUCTANCE: Water years 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1974 to current year.

INSTRUMENTATION.--Specific-conductance recorder since July 1974.

REMARKS.--Missing specific-conductance data for October through February and other periods due to fouling of probe or no flow.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,640 micromhos Sept. 21, 1978; minimum recorded, 178 micromhos Mar. 13, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,450 micromhos May 4; minimum recorded, 244 micromhos Sept. 24.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
NOV					
03...	1330	220	910	18.0	468
DEC					
04...	1300	.05	1210	14.0	759
JAN					
03...	1245	.09	1040	12.0	653
30...	1400	199	980	9.5	613
MAR					
01...	1615	102	1050	13.0	650
21...	0830	63	1090	14.0	693
APR					
06...	1400	211	800	18.5	494
JUN					
01...	1450	143	975	23.5	601
28...	1100	176	1060	23.5	653
29...	0930	179	1050	21.0	592
JUL					
03...	0830	208	1000	20.0	626
24...	1500	210	1050	26.0	649
AUG					
01...	1100	189	1050	23.5	745
21...	1310	87	1200	26.5	679
SEP					
05...	0930	63	1250	22.5	805

11075620 SANTA ANA RIVER SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	908	868	886	894	878	888				---	---	---
2	910	872	885	896	874	887				---	---	---
3	908	866	884	918	898	895				---	---	---
4	900	862	878	914	872	900				---	---	---
5	906	858	877	916	892	905				---	---	---
6	886	826	859	910	890	901				---	---	---
7	856	804	824	904	880	892				---	---	---
8	848	804	821	970	906	949				---	---	---
9	854	800	819	970	950	960				---	---	---
10	824	794	806	954	812	930				---	---	---
11	846	798	826	986	690	869				---	---	---
12	832	802	822	1010	814	917				906	758	840
13	824	802	815	992	684	884				982	778	870
14	826	792	812	1110	994	1060				1020	816	917
15	818	794	810	1190	1060	1110				936	734	861
16	832	800	816	1210	1080	1150				918	812	871
17	822	802	813	1230	1090	1180				906	782	832
18	834	792	813	1270	1140	1210				830	696	759
19	926	808	892	1310	1180	1240				958	814	886
20	920	896	906	1300	1190	1250				958	820	894
21	922	896	911	---	---	---				1050	838	935
22	910	878	896	---	---	---				1040	914	964
23	908	878	895	---	---	---				1030	906	952
24	902	878	886	---	---	---				994	858	919
25	896	874	888	---	---	---				1080	912	952
26	902	880	891	---	---	---				994	858	913
27	902	878	891	---	---	---				1060	936	987
28	898	882	891	---	---	---				1070	950	997
29	894	872	886	---	---	---				1050	930	1000
30	898	880	890	---	---	---				---	---	---
31	900	880	891	---	---	---				---	---	---
MONTH	926	792	861	---	---	---				---	---	---

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	848	728	796	870	830	851
2	---	---	---	1210	946	1130	816	760	786	1020	764	872
3	---	---	---	1220	1140	1190	882	824	856	1380	1070	1300
4	---	---	---	1210	1160	1180	896	834	862	1450	1000	1370
5	---	---	---	1180	1100	1140	858	814	832	960	866	890
6	946	864	899	1120	990	1080	862	806	821	916	868	890
7	1040	910	959	1120	754	1080	864	814	831	908	808	888
8	1070	990	1020	1100	1050	1070	854	820	832	906	842	887
9	1090	930	988	1080	1030	1050	862	820	836	962	870	908
10	1000	918	974	1080	1020	1050	864	812	837	980	946	966
11	988	926	962	1060	998	1030	866	812	832	1020	972	992
12	1030	910	954	1030	996	1010	842	810	827	1060	986	1030
13	972	914	942	1020	400	909	842	804	828	1030	802	1010
14	952	712	884	1010	976	992	898	832	861	1000	978	990
15	954	842	892	1030	994	1010	920	854	882	1020	966	987
16	930	822	860	1060	1000	1030	944	842	885	984	956	969
17	878	790	820	1160	610	982	902	818	848	978	936	956
18	---	---	---	1110	858	1040	872	800	825	954	922	941
19	---	---	---	1180	758	974	834	800	811	962	924	936
20	---	---	---	1260	940	1170	868	788	825	942	916	929
21	---	---	---	1260	910	1140	906	840	875	942	916	928
22	---	---	---	1120	989	1030	992	896	962	944	916	930
23	---	---	---	982	918	955	992	936	961	970	928	944
24	---	---	---	986	918	948	972	914	944	1010	956	978
25	---	---	---	1030	972	1000	942	882	913	1010	988	1000
26	---	---	---	1060	1010	1030	918	846	860	1010	986	994
27	---	---	---	1030	412	757	872	830	854	1000	984	991
28	---	---	---	1120	346	865	870	822	843	1010	972	986
29	---	---	---	1170	820	1090	860	818	836	988	958	977
30	---	---	---	1180	1030	1140	860	826	840	986	959	968
31	---	---	---	1040	858	980	---	---	---	974	959	962
MONTH	---	---	---	1260	346	1030	992	728	853	1450	764	975

11075620 SANTA ANA RIVER SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	974	950	965	1060	1010	1040	1100	1070	1080	1050	936	1000
2	992	956	971	1070	1010	1030	1100	1060	1070	1060	956	1010
3	1020	990	1000	1040	1000	1020	1100	980	1040	1060	936	997
4	1050	996	1010	1040	1010	1020	1090	956	1030	1190	934	1070
5	1030	1020	1030	1040	1010	1020	1080	950	1030	1200	968	1030
6	1030	1000	1020	1050	1010	1030	1080	910	1030	1050	948	994
7	1120	1010	1030	1050	1030	1040	1100	958	1040	1050	924	1000
8	1410	1000	1260	1050	1030	1040	1110	998	1060	1020	904	962
9	1060	972	1020	1050	1040	1040	1130	1080	1100	990	868	937
10	1080	1040	1060	1070	1020	1040	1160	1050	1100	966	522	824
11	1090	1060	1070	1050	1030	1040	1160	1060	1110	566	504	531
12	1080	1050	1060	1060	1040	1050	1190	1110	1140	566	512	531
13	1060	1040	1050	1060	1040	1050	1210	1110	1160	514	500	508
14	1050	1020	1040	1050	1040	1050	1340	1190	1280	502	486	496
15	1050	1020	1030	1060	1030	1050	1360	1240	1320	496	460	484
16	1040	1010	1020	1070	938	1040	1320	1240	1300	468	460	464
17	1030	982	1010	1060	1040	1050	1310	1270	1290	466	458	463
18	1020	908	994	1060	1040	1050	1300	1250	1270	466	454	460
19	1030	958	1010	1060	1030	1040	1300	1220	1260	458	428	445
20	1030	994	1010	1050	1030	1040	1240	1220	1240	432	392	406
21	1060	1010	1040	1050	998	1040	1250	1190	1210	398	294	349
22	1060	1000	1050	1060	1010	1040	1230	1180	1200	304	290	298
23	1070	1030	1040	1070	978	1030	1210	1180	1190	294	280	289
24	1060	1020	1040	1070	932	1050	1260	1180	1210	286	244	270
25	1060	1040	1050	1080	1030	1060	1270	1200	1230	---	---	---
26	1060	1030	1050	1080	1050	1060	1250	1160	1220	---	---	---
27	1060	1030	1050	1070	1030	1050	1250	1120	1180	---	---	---
28	1070	1040	1050	1090	1040	1060	1200	1040	1130	---	---	---
29	1060	1030	1040	1100	1060	1080	1100	1060	1090	---	---	---
30	1050	1020	1040	1100	1070	1080	1090	1050	1070	---	---	---
31	---	---	---	1100	1040	1080	1070	988	1030	---	---	---
MONTH	1410	908	1040	1100	932	1050	1360	908	1150	1200	244	654
YEAR	1450	244	959									

11075720 CARBON CREEK BELOW CARBON CANYON DAM, CA

LOCATION.--Lat 33°54'40", long 117°50'29", in SW¼NE¼ sec.17, T.3 S., R.9 W., Orange County, Hydrologic Unit 18070106, on right wall of outlet channel 250 ft (76 m) downstream from toe of Carbon Canyon Dam, and 2.4 mi (3.9 km) northwest of Yorba Linda.

DRAINAGE AREA.--19.5 mi² (50.5 km²).

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 396.29 ft (120.789 m) Corps of Engineers datum. Prior to Dec. 3, 1971, at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records fair. Flow regulated by Carbon Canyon flood-control reservoir, capacity, 6,610 acre-ft (8.15 hm³). No diversion above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--18 years, 0.75 ft³/s (0.021 m³/s), 543 acre-ft/yr (670,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 446 ft³/s (12.6 m³/s) Feb. 25, 1969, gage height, 4.64 ft (1.414 m), present datum, from rating curve extended above 110 ft³/s (3.12 m³/s) on basis of computation of flow in concrete-lined channel at gage heights 6.18 ft (1.884 m) and 4.12 ft (1.256 m); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 198 ft³/s (5.61 m³/s) Jan. 31, gage height, 3.40 ft (1.036 m), from rating curve extended as explained above; no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	0	80	17	4.8	.40	.12			
2			0	0	0	1.3	3.0	.36	.11			
3			0	0	0	.70	2.0	.36	.11			
4			0	0	0	.79	1.9	.36	.09			
5			0	16	0	1.1	5.0	.27	.06			
6			0	34	27	.71	2.7	.64	.06			
7			0	3.0	3.5	.79	2.3	.48	.06			
8			0	1.0	1.5	.79	1.5	.48	.06			
9			0	1.0	1.2	.79	1.2	.41	.06			
10			0	1.0	.98	.67	1.9	.36	.04			
11			0	1.0	.87	.63	1.5	.36	.04			
12			0	1.0	.69	.63	1.5	.30	.04			
13			0	1.0	1.8	.53	1.3	.25	.04			
14			0	4.2	2.3	.48	1.4	.19	.04			
15			0	4.1	.88	.42	1.1	.17	.02			
16			0	4.7	.64	.36	.86	.68	.02			
17			0	5.0	.63	.35	1.0	.98	0			
18			0	1.0	.66	.26	.81	.86	0			
19			6.2	1.0	.72	8.1	1.2	.73	0			
20			0	1.0	.71	21	1.7	.63	0			
21			0	1.0	15	10	1.5	.57	0			
22			0	1.0	11	2.2	1.2	.48	0			
23			0	0	3.7	1.5	.97	.48	0			
24			0	0	4.0	.79	.79	.41	0			
25			0	0	3.2	.79	.72	.36	0			
26			0	0	1.8	.79	.68	.35	0			
27			0	0	1.5	1.8	1.2	.25	0			
28			0	0	1.2	52	.80	.25	0			
29			0	0	---	55	.60	.22	0			
30			0	0	---	7.9	.50	.17	0			
31		---	0	80	---	5.6	---	.17	---			---
TOTAL	0	0	6.2	162.0	165.48	195.77	47.63	12.98	.97	0	0	0
MEAN	0	0	.20	5.23	5.91	6.32	1.59	.42	.032	0	0	0
MAX	0	0	6.2	80	80	55	5.0	.98	.12	0	0	0
MIN	0	0	0	0	0	.26	.50	.17	0	0	0	0
AC-FT	0	0	12	321	328	388	94	26	1.9	0	0	0

CAL YR 1978 TOTAL 1763.51 MEAN 4.83 MAX 252 MIN 0 AC-FT 3500
WTR YR 1979 TOTAL 591.03 MEAN 1.62 MAX 80 MIN 0 AC-FT 1170

11075755 SANTA ANA RIVER AT BALL ROAD, AT ANAHEIM, CA

LOCATION.--Lat 33°49'00", long 117°52'17", in SE¼SW¼SE¼ sec.24, T.4 S., R.10 W., Orange County, Hydrologic Unit 18070203, 350 ft (110 m) south of Ball Road, 0.6 mi (1.0 km) west of Batavia Street, and 1.0 mi (1.6 km) east of State College Boulevard in Anaheim, and 16 mi (26 km) downstream from Prado Dam.

DRAINAGE AREA.--1,587 mi² (4,110 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder with concrete cut-off wall. Altitude of gage is 170 ft (51.8 m), from topographic map.

REMARKS.--Records poor. River flow is regulated by Prado Dam, infiltration ponds and diversions.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,380 ft³/s (237 m³/s) Jan. 6, 1979, gage height, 5.40 ft (1.646 m); no flow for many months each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,380 ft³/s (237 m³/s) Jan. 6, gage height, 5.40 ft (1.646 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.04	24	643	27	0	1.1	0	0	.65	
2		0	0	23	194	30	0	0	0	0	1.0	
3		0	0	22	166	21	0	0	0	0	.91	
4		0	0	21	166	14	0	0	0	0	.91	
5		0	0	102	99	9.9	0	0	0	0	1.0	
6		0	0	691	33	0	0	0	0	0	1.7	
7		0	0	254	28	0	0	0	0	0	1.7	
8		0	0	218	70	3.4	0	0	.72	1.7	1.8	
9		0	0	244	55	11	0	0	2.0	3.0	1.7	
10		0	0	62	63	8.5	0	0	1.6	2.6	1.6	
11		0	0	4.0	47	32	0	0	.91	0	1.8	
12		0	0	3.2	20	45	0	0	0	0	2.0	
13		0	0	2.8	10	342	0	0	0	0	1.8	
14		0	0	2.2	12	30	0	0	0	.10	2.0	
15		0	0	22	15	15	0	4.9	0	1.6	1.7	
16		0	0	9.5	29	5.7	0	4.1	0	1.7	0	
17		0	38	1.0	13	82	0	.92	0	1.7	0	
18		0	242	0	12	43	68	5.7	0	.39	0	
19		0	112	0	23	697	51	7.0	0	0	0	
20		0	84	0	20	194	11	7.0	0	1.0	0	
21		10	28	0	266	105	15	8.0	0	2.4	0	
22		1.0	22	0	124	19	15	7.0	0	2.8	0	
23		.80	20	0	109	6	13	5.0	0	1.4	0	
24		.70	17	5.0	73	0	12	5.3	0	0	0	
25		.60	21	73	37	2.2	12	5.7	0	0	0	
26		.50	22	33	32	9.6	77	5.3	0	0	0	
27		.50	27	18	19	1440	51	6.6	0	0	0	
28		.40	25	30	19	1400	15	7.0	0	0	0	
29		.40	24	23	---	612	13	5.4	0	.13	0	
30		.40	22	588	---	153	10	.06	0	1.0	0	
31		---	21	1320	---	33	---	0	---	.39	0	---
TOTAL	0	15.30	725.04	3795.7	2397	5384.3	363	86.08	5.23	21.91	22.27	0
MEAN	0	.51	23.4	122	85.6	174	12.1	2.78	.17	.71	.72	0
MAX	0	10	242	1320	643	1440	77	8.0	2.0	3.0	2.0	0
MIN	0	0	0	0	10	0	0	0	0	0	0	0
AC-FT	0	30	1440	7530	4750	10680	720	171	10	43	44	0

CAL YR 1978 TOTAL 103872.14 MEAN 285 MAX 5610 MIN 0 AC-FT 206000
WTR YR 1979 TOTAL 12815.83 MEAN 35.1 MAX 1440 MIN 0 AC-FT 25420

11075755 SANTA ANA RIVER AT BALL ROAD, NEAR ANAHEIM, CA

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1976 to current year.
SEDIMENT RECORDS: October 1976 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 28,000 mg/L Feb. 10, 1978; minimum daily mean, no flow on many days each year.
SEDIMENT DISCHARGE: Maximum daily, 229,000 tons (208,000 metric tons) Feb. 10, 1978; minimum daily, 0 tons on many days each year.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 5,880 mg/L Mar. 27; minimum daily mean, no flow many days.
SEDIMENT DISCHARGE: Maximum daily, 38,400 tons (34,800 metric tons) Mar. 27; minimum daily, 0 tons many days.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	---	---	10.0	---		---				
2		---	---	---	---	---		---				
3		---	---	---	---	---		---				
4		---	---	---	---	---		---				
5		---	---	11.0	---	---		---				
6		---	---	---	---	---		---				
7		---	---	---	---	---		---				
8		---	---	9.5	---	---		---				
9		---	---	---	---	---		---				
10		---	---	---	---	---		---				
11		---	---	---	---	---		---				
12		---	---	---	---	---		---				
13		---	---	---	---	---		---				
14		---	---	---	---	---		---				
15		---	---	---	---	---		---				
16		---	---	---	---	---		---				
17		---	---	---	---	---		---				
18		---	11.5	---	---	---		22.0				
19		---	10.0	---	---	---		---				
20		---	---	---	---	16.0		---				
21		---	11.5	---	12.0	14.5		---				
22		14.0	8.5	---	---	---		---				
23		---	---	---	---	---		---				
24		---	---	---	---	---		---				
25		---	---	---	---	---		---				
26		---	---	---	---	---		---				
27		---	---	---	---	15.0		---				
28		---	---	---	---	---		---				
29		---	11.0	---	---	18.0		---				
30		---	---	---	---	---		---				
31		---	---	10.0	---	---		---				
MONTH		---	---	---	---	---		---				

11075755 SANTA ANA RIVER AT BALL ROAD, IN ANAHEIM, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1				0	0	0	.04	5	0
2				0	0	0	0	0	0
3				0	0	0	0	0	0
4				0	0	0	0	0	0
5				0	0	0	0	0	0
6				0	0	0	0	0	0
7				0	0	0	0	0	0
8				0	0	0	0	0	0
9				0	0	0	0	0	0
10				0	0	0	0	0	0
11				0	0	0	0	0	0
12				0	0	0	0	0	0
13				0	0	0	0	0	0
14				0	0	0	0	0	0
15				0	0	0	0	0	0
16				0	0	0	0	0	0
17				0	0	0	38	166	180
18				0	0	0	242	1470	1060
19				0	0	0	112	240	73
20				0	0	0	84	200	45
21				10	20	.54	28	166	13
22				1.0	8	.02	22	98	5.8
23				.80	8	.02	20	80	4.3
24				.70	8	.02	17	70	3.2
25				.60	7	.01	21	60	3.4
26				.50	7	.01	22	50	3.0
27				.50	7	.01	27	40	2.9
28				.40	6	.01	25	40	2.7
29				.40	6	.01	24	38	2.5
30				.40	6	.01	22	35	2.1
31				---	---	---	21	30	1.7
TOTAL	0		0	15.30	---	.66	725.04	---	1402.60

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	24	30	1.9	643	1270	2540	27	70	3.0
2	23	30	1.9	194	800	419	30	70	3.4
3	22	30	1.8	166	500	224	21	60	1.9
4	21	30	1.7	166	400	179	14	50	1.0
5	102	332	390	99	300	80	9.9	50	1.5
6	691	2200	6310	33	200	18	0	0	0
7	254	1500	1030	28	100	7.6	0	0	0
8	218	1140	671	70	150	28	3.4	50	1.0
9	244	1000	659	55	120	18	11	600	39
10	62	750	126	63	130	22	8.5	500	27
11	4.0	500	5.4	47	120	15	32	1230	210
12	3.2	200	1.7	20	110	5.9	45	1390	330
13	2.8	100	.76	10	100	2.7	342	2810	2800
14	2.2	50	.30	12	90	2.9	30	740	60
15	22	200	12	15	80	3.2	15	400	16
16	9.5	100	26	29	70	5.5	5.7	200	3.0
17	1.0	40	.11	13	60	2.1	82	1360	301
18	0	0	0	12	60	1.9	43	1030	120
19	0	0	0	23	50	3.1	697	3300	5700
20	0	0	0	20	60	3.2	194	2710	2400
21	0	0	0	266	520	373	105	1530	400
22	0	0	0	124	400	134	19	250	2.0
23	0	0	0	109	300	134	0	0	0
24	5.0	13	2.8	73	200	39	0	0	0
25	73	200	39	37	100	10	2.2	72	.51
26	33	180	16	32	90	7.8	9.6	80	.65
27	18	160	7.8	19	90	4.6	1440	5880	38400
28	30	140	11	19	80	4.1	1400	5230	19000
29	23	120	7.5	---	---	---	612	1100	1120
30	588	727	6260	---	---	---	153	400	79
31	1320	2520	9410	---	---	---	33	100	8.6
TOTAL	3795.70	---	24993.67	2397	---	4287.6	5384.30	---	71028.56

11075755 SANTA ANA RIVER AT BALL ROAD, IN ANAHEIM, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	1.1	30	.09	0	0	0
2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	.72	100	6.2
9	0	0	0	0	0	0	2.0	300	429
10	0	0	0	0	0	0	1.6	250	37
11	0	0	0	0	0	0	.91	200	23
12	0	0	0	0	0	0	0	100	6.5
13	0	0	0	0	0	0	0	50	1.4
14	0	0	0	0	0	0	0	10	0
15	0	0	0	4.9	20	.14	0	0	0
16	0	0	0	4.1	20	.22	0	0	0
17	0	0	0	.92	10	.02	0	0	0
18	68	1300	240	5.7	30	.74	0	0	0
19	51	1090	150	7.0	40	1.2	0	0	0
20	11	100	3.0	7.0	40	1.2	0	0	0
21	15	200	8.1	8.0	50	1.6	0	0	0
22	15	200	8.1	7.0	50	1.6	0	0	0
23	13	150	5.3	5.0	30	.65	0	0	0
24	12	100	3.2	5.3	30	.69	0	0	0
25	12	100	3.2	5.7	30	.74	0	0	0
26	77	1350	280	5.3	30	.69	0	0	0
27	51	1090	150	6.6	40	1.1	0	0	0
28	15	200	8.1	7.0	40	1.2	0	0	0
29	13	100	3.5	5.4	20	.36	0	0	0
30	10	50	1.4	.06	10	0	0	0	0
31	---	---	---	0	0	0	---	---	---
TOTAL	363.00	---	863.90	86.08	---	12.24	5.23	---	503.10

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	.65	10	.02			
2	0	0	0	1.0	10	.03			
3	0	0	0	.91	10	.02			
4	0	0	0	.91	10	.02			
5	0	0	0	1.0	10	.03			
6	0	0	0	1.7	20	.09			
7	0	0	0	1.7	20	.09			
8	1.7	10	.03	1.8	20	.10			
9	3.0	20	.21	1.7	20	.09			
10	2.6	20	.17	1.6	20	.09			
11	0	0	0	1.8	20	.10			
12	0	0	0	2.0	20	.11			
13	0	0	0	1.8	20	.10			
14	.10	10	0	2.0	20	.11			
15	1.6	10	.05	1.7	20	.09			
16	1.7	11	.07	0	0	0			
17	1.7	10	.06	0	0	0			
18	.39	10	.02	0	0	0			
19	0	0	0	0	0	0			
20	1.0	10	.02	0	0	0			
21	2.4	10	.08	0	0	0			
22	2.8	10	.09	0	0	0			
23	1.4	10	.05	0	0	0			
24	0	0	0	0	0	0			
25	0	0	0	0	0	0			
26	0	0	0	0	0	0			
27	0	0	0	0	0	0			
28	0	0	0	0	0	0			
29	.13	10	0	0	0	0			
30	1.0	10	.03	0	0	0			
31	.39	10	.01	0	0	0			
TOTAL	21.91	---	.89	22.27	---	1.09	0		0
YEAR	12815.83		103094.3						

11075755 SANTA ANA RIVER AT BALL ROAD, IN ANAHEIM, CA--Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1978	0.0	0.0	0	0
NOVEMBER ...	15.30	0.66	1	2
DECEMBER ...	725.04	1402.60	344	1750
JANUARY 1979	3795.70	24993.67	6730	31700
FEBRUARY ...	2397.00	4287.60	2000	6290
MARCH	5384.30	71028.56	11700	82800
APRIL	363.00	863.90	97	961
MAY	86.08	12.24	0	12
JUNE	5.23	503.10	0	503
JULY	21.91	0.89	0	1
AUGUST	22.27	1.09	0	1
SEPTEMBER ..	0.0	0.0	0	0
TOTAL	12815.83	103094.31	20872	124020

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
DEC 19...	1200	10.0	136	210	77	74	85	88
JAN 08...	0930	9.5	210	1150	652	--	48	53
31...	1245	10.0	758	2280	4670	--	53	66
FEB 01...	1530	10.0	210	1070	607	53	65	75
MAR 27...	1515	15.0	2840	13200	101000	--	11	20

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
DEC 19...	90	90	90	94	99	100	--	--
JAN 08...	58	63	66	69	77	94	100	--
31...	77	83	86	88	96	99	100	--
FEB 01...	86	92	96	98	99	100	--	--
MAR 27...	27	29	36	38	47	76	93	98

11075755 SANTA ANA RIVER AT BALL ROAD, IN ANAHEIM, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	NUMBER OF SAMPLING POINTS	STREAMFLOW, INSTANTANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
SEP							
27...	1440	5	.00	1	1	18	42

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
SEP							
27...	67	77	82	86	92	99	100

11075800 SANTIAGO CREEK AT MODJESKA, CA

LOCATION.--Lat 33°42'32", long 117°38'05", in SE¼SE¼NW¼ sec.29, T.5 S., R.7 W., Orange County, Hydrologic Unit 18070203, on right bank at Santiago Canyon road bridge, 0.3 mi (0.5 km) west of Modjeska, and 0.4 mi (0.6 km) downstream from Harding Creek.

DRAINAGE AREA.--12.5 mi² (32.4 km²).

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,254.35 ft (382.326 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 10, 1969, at datum 4.42 ft (1.347 m) higher.

REMARKS.--Records poor. Slight regulation by Modjeska Reservoir on Harding Creek. No diversion above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--18 years, 7.43 ft³/s (0.210 m³/s), 5,380 acre-ft/yr (6.63 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,520 ft³/s (185 m³/s) Feb. 25, 1969, gage height, 10.50 ft (3.200 m), present datum, from rating curve extended above 840 ft³/s (23.8 m³/s) on basis of slope-area measurement of maximum flow; no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	1930	*555	15.7	2.15	0.655
Mar. 28	0830	297	8.41	1.11	0.338

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.17	2.4	1.8	18	15	47	15	4.7	1.4	.45	.20
2	.14	.18	2.0	1.7	19	15	39	16	4.4	.70	.13	.20
3	.15	.18	1.6	1.6	18	15	33	15	4.1	1.7	0	.20
4	.14	.18	1.4	1.6	15	14	29	14	4.1	1.5	0	.20
5	.14	.18	1.4	109	14	14	26	14	3.9	.70	0	.20
6	.14	.19	1.3	113	12	13	24	14	3.9	.96	0	.20
7	.14	.18	1.3	24	12	13	24	14	3.9	.20	0	.20
8	.17	.18	1.2	16	11	13	24	14	3.6	0	0	0
9	.17	.18	1.2	14	9.7	13	24	13	2.6	0	0	0
10	.17	.23	1.1	12	9.2	16	22	12	2.6	.45	0	0
11	.17	.42	1.1	11	8.6	21	21	11	6.1	1.3	0	0
12	.12	.87	1.1	10	8.6	20	20	11	13	4.7	0	0
13	.11	1.5	1.1	8.9	9.7	20	19	10	12	6.4	0	0
14	.10	1.7	1.1	7.8	11	15	19	12	15	5.0	0	0
15	.10	1.1	1.1	8.3	11	13	18	14	17	4.1	0	0
16	.10	.98	1.0	7.5	10	13	18	13	16	1.2	.45	0
17	.10	1.0	3.5	7.2	9.7	28	18	11	13	0	.70	0
18	.10	.98	9.0	7.8	9.5	32	17	10	12	0	.96	0
19	.10	.94	12	7.6	9.2	57	15	9.0	11	0	.96	0
20	.14	1.0	8.5	7.4	8.6	48	14	7.5	9.9	0	1.2	0
21	.14	2.8	6.9	7.2	15	49	13	6.1	10	0	1.7	0
22	.14	3.8	5.3	7.0	16	41	13	6.1	8.6	0	1.7	0
23	.12	2.9	4.4	6.8	17	36	12	5.3	6.7	0	1.7	.20
24	.13	2.7	3.9	6.6	16	31	12	5.0	4.7	0	1.5	.70
25	.14	2.2	3.5	6.4	15	31	11	5.0	2.3	0	.96	.45
26	.15	2.0	3.0	6.2	15	29	10	5.0	1.5	0	.45	0
27	.15	2.3	2.7	6.0	15	111	11	4.7	.45	0	.45	0
28	.15	2.0	2.4	6.2	14	232	13	5.3	.45	.96	.45	0
29	.16	2.0	2.3	14	---	146	13	5.3	.96	.45	.70	0
30	.15	2.1	2.0	28	---	97	14	5.3	1.2	.70	.45	0
31	.16	---	2.0	19	---	70	---	5.3	---	.20	.20	---
TOTAL	4.23	37.14	92.8	491.6	356.8	1281	593	307.9	199.66	32.62	15.11	2.75
MEAN	.14	1.24	2.99	15.9	12.7	41.3	19.8	9.93	6.66	1.05	.49	.092
MAX	.17	3.8	12	113	19	232	47	16	17	6.4	1.7	.70
MIN	.10	.17	1.0	1.6	8.6	13	10	4.7	.45	0	0	0
AC-FT	8.4	74	184	975	708	2540	1180	611	396	65	30	5.5

CAL YR 1978 TOTAL 10776.03 MEAN 29.5 MAX 938 MIN .10 AC-FT 21380
WTR YR 1979 TOTAL 3414.61 MEAN 9.36 MAX 232 MIN 0 AC-FT 6770

11077500 SANTIAGO CREEK AT SANTA ANA, CA

LOCATION.--Lat 33°46'13", long 117°53'01", in NW¼SW¼NW¼ sec.1, T.5 S., R.10 W., Orange County, Hydrologic Unit 18070203, on left bank 127 ft (39 m) upstream from Bristol Street bridge at Santa Ana, and 1,700 ft (520 m) upstream from mouth at Santa Ana River.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--98.6 mi² (255.4 km²).

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only October to December 1928, published in WSP 1315-B.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 105.00 ft (32.004 m) Orange County Environmental Management Agency datum. Prior to Sept. 8, 1969, at site 0.1 mi (0.2 km) upstream at different datum. Prior to July 21, 1976, at site 127 ft (39 m) downstream at datum 2.66 ft (0.811 ft) lower.

REMARKS.--Records fair. Flow regulated by Santiago Reservoir, capacity, 25,000 acre-ft (30.8 hm³), since January 1963 by Villa Park flood-control reservoir, capacity, 15,500 acre-ft (19.1 hm³), and affected by intervening gravel pits. Diversions above station by Irvine Co. and Serrano and Carpenter Irrigation Districts. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--51 years, 5.18 ft³/s (0.147 m³/s), 3,750 acre-ft/yr (4.62 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,600 ft³/s (187 m³/s) Feb. 25, 1969, gage height, 9.10 ft (2.774 m), site and datum then in use; maximum gage height, 9.85 ft (3.002 m) Jan. 16, 1952; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,310 ft³/s (37.1 m³/s) Jan. 5, gage height, 5.20 ft (1.585 m); no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	6.9	.45						
2	0	0	0	0	9.9	0						
3	0	0	0	0	.26	0						
4	0	0	0	0	0	0						
5	0	0	0	152	0	0						
6	0	0	0	5.6	0	0						
7	0	0	0	0	0	0						
8	0	0	0	0	0	0						
9	0	0	0	.03	0	0						
10	0	0	0	0	0	0						
11	0	5.8	0	0	0	0						
12	.30	.65	0	0	0	0						
13	0	10	0	0	0	.10						
14	0	.19	0	0	4.3	0						
15	0	0	0	4.1	0	0						
16	0	0	0	.37	0	0						
17	0	0	29	.02	0	4.6						
18	0	0	24	3.4	0	0						
19	0	.45	4.9	.40	0	12						
20	0	0	.08	.08	.03	3.5						
21	0	12	0	0	15	1.2						
22	0	1.7	0	0	.14	0						
23	0	.21	0	0	11	0						
24	0	0	0	0	0	0						
25	0	0	0	0	0	0						
26	0	0	0	0	0	0						
27	0	0	0	0	0	163						
28	0	0	0	0	0	107						
29	0	0	0	0	---	5.5						
30	0	0	0	58	---	0						
31	0	---	0	60	---	0	---		---			---
TOTAL	.30	31.00	57.98	284.00	47.53	297.35	0	0	0	0	0	0
MEAN	.010	1.03	1.87	9.16	1.70	9.59	0	0	0	0	0	0
MAX	.30	12	29	152	15	163	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	.6	61	115	563	94	590	0	0	0	0	0	0

CAL YR 1978 TOTAL 9120.44 MEAN 25.0 MAX 1570 MIN 0 AC-FT 18090
WTR YR 1979 TOTAL 718.16 MEAN 1.97 MAX 163 MIN 0 AC-FT 1420

11078000 SANTA ANA RIVER AT SANTA ANA, CA

LOCATION.--Lat 33°44'56", long 117°54'30", in NW¼SW¼SE¼ sec.10, T.5 S., R.10 W., Orange County, Hydrologic Unit 18070203, on pier of Fifth Street Bridge in Santa Ana, 1.8 mi (2.9 km) downstream from Santiago Creek.

DRAINAGE AREA.--1,700 mi² (4,403 km²), excludes 768 mi² (1,989 km²) above Lake Elsinore.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1923 to current year.

REVISED RECORDS.--WDR CA-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 71.20 ft (21.702 m) Orange County datum. Jan. 3, 1923, to Jan. 24, 1929, at same site at different datum. Jan. 25, 1929, to June 20, 1948, at site 450 ft (137 m) upstream at different datum. June 21, 1948, to May 2, 1960, at same site at different datum. Feb. 28, 1961, to Oct. 1, 1961, at same site at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records fair above 100 ft³/s (2.83 m³/s) and poor below. Natural flow affected by ground-water withdrawals, diversions, importation by Metropolitan Water District, municipal use, return flow from irrigation. Since 1940, natural flow affected by Prado flood-control reservoir, capacity, 201,200 acre-ft (248 hm³), three small flood-control reservoirs, combined capacity, 31,900 acre-ft (39.3 hm³), Big Bear Lake (station 11049000), and Santiago Reservoir, capacity, 25,000 acre-ft (30.8 hm³). Discharge up to 100 ft³/s (2.83 m³/s) can be diverted from Carbon Creek to Coyote Creek 1.5 mi (2.4 km) upstream from mouth of Carbon Creek. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--17 years (water years 1924-40), 23.4 ft³/s (0.663 m³/s), 16,940 acre-ft/yr (20.9 hm³/yr); 39 years (unadjusted for storage since 1940) 34.5 ft³/s (0.977 m³/s) 25,000 acre-ft/yr (30.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,300 ft³/s (1,310 m³/s) Mar. 3, 1938, gage height, 10.20 ft (3.109 m), site and datum then in use, on basis of slope-area measurement of maximum flow; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,340 ft³/s (151 m³/s) Jan. 6, gage height, 4.10 ft (1.250 m); no flow many days during the year.

REVISIONS.--The maximum discharge for the water year 1978 has been revised to 12,000 ft³/s (340 m³/s) Mar. 4, 1978, gage height, 6.47 ft (1.972 m) superseding figure published in the report for 1978.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	2.5	6.4	530	65	13	1.2				
2		0	1.1	6.4	251	56	8.2	1.0				
3		0	.22	8.0	156	35	4.6	0				
4		0	0	6.4	156	29	2.9	0				
5		0	0	410	120	20	1.6	0				
6		0	0	740	35	10	.70	0				
7		0	0	314	40	8.0	.30	0				
8		0	0	308	24	5.0	.10	0				
9		0	0	340	32	5.0	.10	0				
10		0	0	184	22	4.0	.10	0				
11		20	0	50	16	3.0	.10	0				
12		3.0	0	35	9.2	3.0	.10	0				
13		25	0	26	4.0	55	.10	0				
14		5.0	0	33	67	126	.10	0				
15		1.0	0	171	8.4	77	.10	0				
16		.50	0	79	4.0	44	.10	1.3				
17		0	85	48	3.0	215	.10	2.0				
18		0	325	55	2.7	316	34	.37				
19		0	147	20	2.6	650	51	4.5				
20		0	65	15	2.5	270	1.1	5.4				
21		0	45	14	300	170	1.5	5.4				
22		9.2	32	16	150	72	1.5	6.1				
23		4.5	13	16	250	32	1.3	6.0				
24		2.8	7.4	14	180	27	1.2	4.0				
25		5.9	6.9	12	140	26	1.2	4.2				
26		5.9	6.9	14	120	23	39	4.5				
27		2.0	6.4	29	100	1030	51	4.2				
28		3.7	5.4	29	80	898	2.1	5.1				
29		4.1	8.6	44	---	250	1.4	5.3				
30		2.5	9.2	623	---	100	1.3	3.2				
31		---	8.0	1400	---	22	---	0	---			---
TOTAL	0	95.90	774.62	5074.2	2805.4	4654.0	219.90	63.77	0	0	0	0
MEAN	0	3.20	25.0	164	100	150	7.33	2.06	0	0	0	0
MAX	0	25	325	1400	530	1030	51	6.1	0	0	0	0
MIN	0	0	0	6.4	2.5	3.0	.10	0	0	0	0	0
AC-FT	0	190	1540	10060	5560	9230	436	126	0	0	0	0

CAL YR 1978 TOTAL 111506.89 MEAN 305 MAX 6330 MIN 0 AC-FT 221200
WTR YR 1979 TOTAL 13687.79 MEAN 37.5 MAX 1400 MIN 0 AC-FT 27150

11078000 SANTA ANA RIVER AT SANTA ANA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to September 1969, October 1970 to September 1971, October 1972 to current year.
SEDIMENT RECORDS: October 1967 to September 1971, October 1972 to current year.

REMARKS.--Sediment table omitted for no-flow period July to September.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 78,000 mg/L Feb. 25, 1969; minimum daily mean, no flow for many days each year.
SEDIMENT DISCHARGE: Maximum daily, 2,670,000 tons (2,420,000 metric tons) Feb. 25, 1969; minimum daily, 0 tons on many days each year.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,950 mg/L Mar. 27; minimum daily mean, no flow for many days.
SEDIMENT DISCHARGE: Maximum daily, 14,600 tons (13,200 metric tons) Mar. 27; minimum daily, 0 tons on many days.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	---	---	9.5	14.5	---					
2		---	---	---	---	---	---					
3		---	---	11.5	---	---	---					
4		---	---	---	---	---	---					
5		---	---	12.5	---	---	28.0					
6		---	14.0	11.0	---	---	---					
7		---	---	12.5	---	---	---					
8		---	---	---	---	---	---					
9		---	---	---	---	---	---					
10		---	---	---	---	---	---					
11		---	---	---	---	---	---					
12		---	---	---	---	---	---					
13		---	---	---	---	---	---					
14		---	---	---	---	---	---					
15		---	---	---	---	---	---					
16		---	---	---	---	---	---					
17		---	---	---	---	---	---					
18		---	13.0	---	---	---	---					
19		---	---	---	---	---	---					
20		---	---	---	---	14.0	---					
21		---	---	---	---	14.0	---					
22		14.0	8.0	---	---	---	---					
23		---	---	---	---	---	---					
24		---	---	---	---	---	---					
25		---	---	---	---	---	---					
26		---	---	---	---	---	---					
27		---	---	---	---	15.0	---					
28		---	---	---	---	---	---					
29		21.0	---	---	---	13.5	---					
30		18.5	---	---	---	---	---					
31		---	---	7.0	---	---	---					
MONTH		---	---	---	---	---	---					

11078000 SANTA ANA RIVER AT SANTA ANA, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1				0	0	0	2.5	9	.06
2				0	0	0	1.1	9	.03
3				0	0	0	.22	9	.01
4				0	0	0	0	0	0
5				0	0	0	0	0	0
6				0	0	0	0	0	0
7				0	0	0	0	0	0
8				0	0	0	0	0	0
9				0	0	0	0	0	0
10				0	0	0	0	0	0
11				20	45	2.4	0	0	0
12				3.0	25	.20	0	0	0
13				25	50	3.4	0	0	0
14				5.0	30	.40	0	0	0
15				1.0	10	.03	0	0	0
16				.50	7	.01	0	0	0
17				0	0	0	85	309	301
18				0	0	0	325	1240	1690
19				0	0	0	147	612	298
20				0	0	0	65	190	33
21				0	0	0	45	160	19
22				9.2	133	4.5	32	110	9.5
23				4.5	100	1.2	13	90	3.2
24				2.8	60	.45	7.4	80	1.6
25				5.9	40	.64	6.9	70	1.3
26				5.9	40	.64	6.9	60	1.1
27				2.8	30	.23	6.4	50	.86
28				3.7	25	.25	5.4	40	.58
29				4.1	25	.28	8.6	30	.70
30				2.5	20	.14	9.2	20	.50
31				---	---	---	8.0	10	.22
TOTAL	0		0	95.90	---	14.77	774.62	---	2360.66

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6.4	10	.17	530	975	1400	65	90	16
2	6.4	10	.17	251	196	151	56	80	12
3	8.0	10	.22	156	90	38	35	70	6.6
4	6.4	10	.17	156	85	36	29	60	4.7
5	410	1320	3950	120	80	26	20	50	2.7
6	740	2020	9950	35	75	7.1	10	40	1.1
7	314	917	807	40	70	7.6	8.0	30	.65
8	308	750	624	24	65	4.2	5.0	20	.27
9	340	800	734	32	60	5.2	5.0	10	.14
10	184	350	174	22	50	3.0	4.0	10	.11
11	58	300	47	16	40	1.7	3.0	10	.08
12	35	200	19	9.2	30	.75	3.0	10	.08
13	26	100	7.0	4.0	20	.22	55	138	94
14	33	50	4.5	67	170	63	126	220	75
15	171	316	227	8.4	35	.79	77	100	21
16	79	130	28	4.0	30	.32	44	50	5.9
17	48	96	16	3.0	25	.20	215	401	310
18	55	110	23	2.7	20	.15	316	290	247
19	20	70	3.8	2.6	15	.11	650	650	1140
20	15	60	2.4	2.5	10	.07	270	130	95
21	14	50	1.9	300	1000	810	170	210	96
22	16	40	1.7	150	500	202	72	140	27
23	16	30	1.3	250	900	608	32	90	7.8
24	14	20	.76	180	600	292	27	65	4.7
25	12	20	.65	140	400	151	26	50	3.5
26	14	50	1.9	120	350	113	23	40	2.5
27	29	150	12	100	300	81	1030	2950	14600
28	29	250	20	80	200	43	898	2430	9300
29	44	300	36	---	---	---	250	445	300
30	623	1590	11600	---	---	---	108	100	29
31	1400	2750	10700	---	---	---	22	50	3.0
TOTAL	5074.2	---	38993.64	2805.4	---	4045.41	4654.0	---	26493.83

11078000 SANTA ANA RIVER AT SANTA ANA, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	13	40	1.4	1.2	5	.02			
2	8.2	30	.66	1.0	5	.01			
3	4.6	20	.25	0	0	0			
4	2.9	10	.08	0	0	0			
5	1.6	8	.03	0	0	0			
6	.70	7	.01	0	0	0			
7	.30	6	0	0	0	0			
8	.10	5	0	0	0	0			
9	.10	5	0	0	0	0			
10	.10	5	0	0	0	0			
11	.10	5	0	0	0	0			
12	.10	5	0	0	0	0			
13	.10	5	0	0	0	0			
14	.10	5	0	0	0	0			
15	.10	5	0	0	0	0			
16	.10	5	0	1.3	5	.02			
17	.10	5	0	2.0	5	.03			
18	34	75	6.9	.37	5	0			
19	51	100	14	4.5	5	.06			
20	1.1	5	.01	5.4	5	.07			
21	1.5	5	.02	5.4	5	.07			
22	1.5	5	.02	6.1	5	.08			
23	1.3	5	.02	6.0	5	.08			
24	1.2	5	.02	4.0	5	.05			
25	1.2	5	.02	4.2	5	.06			
26	39	85	9.0	4.5	5	.06			
27	51	100	14	4.2	5	.06			
28	2.1	5	.03	5.1	5	.07			
29	1.4	5	.02	5.3	5	.07			
30	1.3	5	.02	3.2	5	.04			
31	---	---	---	0	0	0			
TOTAL	219.90	---	46.51	63.77	---	.85	0		0
YEAR	13687.79		71955.67						

11078000 SANTA ANA RIVER AT SANTA ANA, CA--Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1978	0.0	0.0	0	0
NOVEMBER ...	95.98	14.77	3	18
DECEMBER ...	774.42	2360.66	349	2710
JANUARY 1979	5074.20	38993.64	5540	44500
FEBRUARY ...	2805.40	4045.41	1560	5610
MARCH	4654.00	26493.83	4520	31000
APRIL	219.90	46.51	24	71
MAY	63.77	0.45	0	1
JUNE	0.0	0.0	0	0
JULY	0.0	0.0	0	0
AUGUST	0.0	0.0	0	0
SEPTEMBER ..	0.0	0.0	0	0
TOTAL	13687.79	71955.67	11996	83910

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPER-ATURE, WATER (DEG C)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
DEC								
18...	1120	12.5	1110	2700	8090	--	38	39
FEB								
01...	1100	9.5	581	1110	1740	--	55	65
MAR								
21...	1255	14.0	148	253	101	67	80	84
27...	1655	15.0	1790	7200	34800	--	13	16
29...	1330	13.5	210	300	170	66	78	85

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
DEC								
18...	59	75	83	88	93	96	98	99
FEB								
01...	76	80	84	86	90	99	100	--
MAR								
21...	88	89	89	91	93	99	100	--
27...	20	24	27	30	36	69	93	99
29...	90	92	93	95	97	99	100	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	NUMBER OF SAM-PLING POINTS	STREAM-FLOW, INSTAN-TANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP											
27...	1340	5	.00	2	18	50	73	85	94	99	100

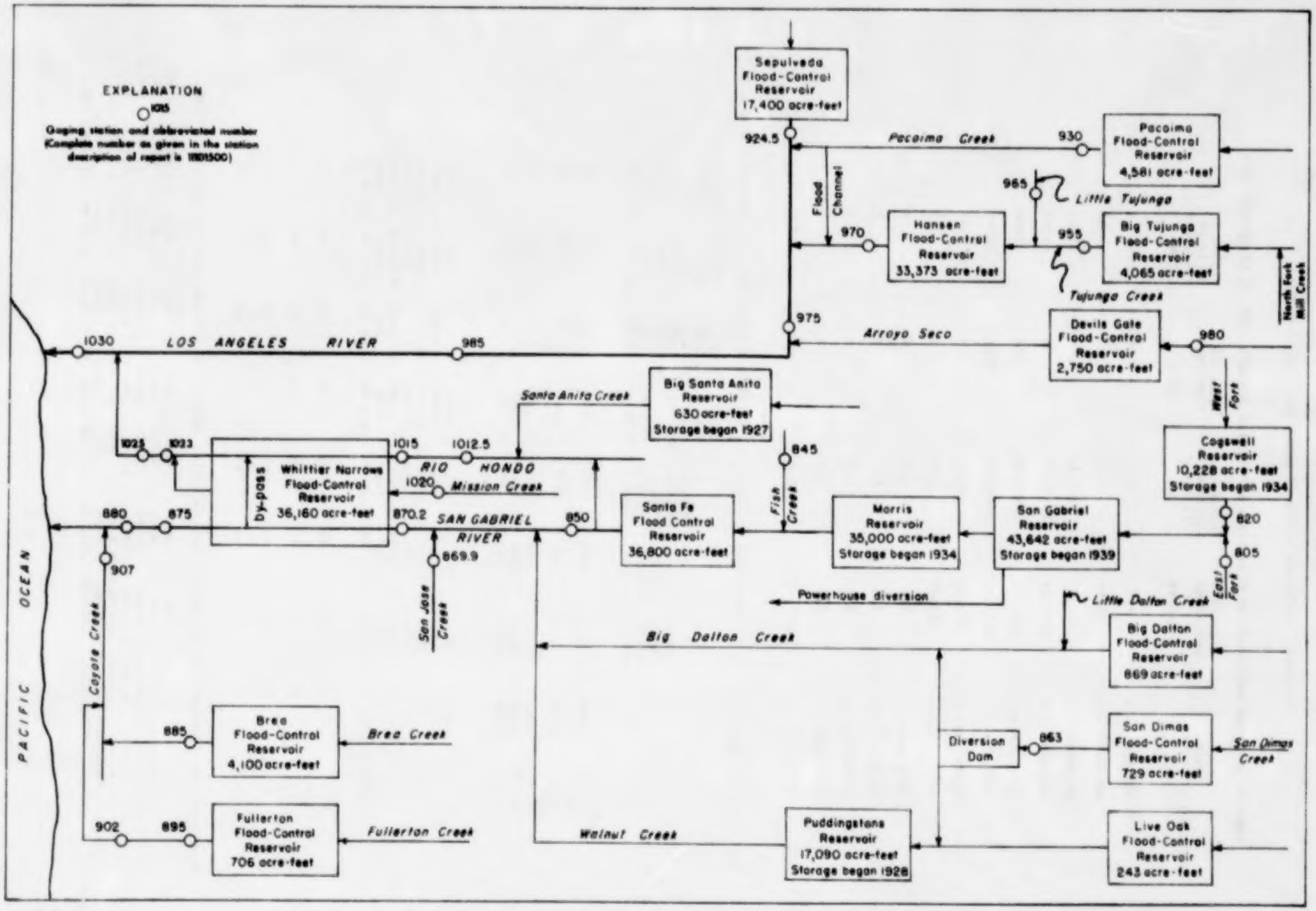

EXPLANATION
1015
Gaging station and abbreviated number (Complete number as given in the station description of report is 11101500)
Sepulveda Flood-Control Reservoir 17,400 acre-feet
924.5
Pacoima Creek
930
Pacoima Flood-Control Reservoir 4,581 acre-feet
Flood Channel
965
Little Tujunga
970
Hansen Flood-Control Reservoir 33,373 acre-feet
955
Big Tujunga Flood-Control Reservoir 4,065 acre-feet
Tujunga Creek
North Fork Mill Creek
975
Arroyo Seco
Devils Gate Flood-Control Reservoir 2,750 acre-feet
980
1030
LOS ANGELES RIVER
985
Santa Anita Creek
Big Santa Anita Reservoir 630 acre-feet Storage began 1927
West Fork
Cogswell Reservoir 10,228 acre-feet Storage began 1934
845
Fish Creek
1025
1023
Whittier Narrows Flood-Control Reservoir 36,160 acre-feet
by-pass
1015
1012.5
RIO HONDO
1020
Mission Creek
880
875
870.2
SAN GABRIEL RIVER
850
Santa Fe Flood Control Reservoir 36,800 acre-feet
Morris Reservoir 35,000 acre-feet Storage began 1934
San Gabriel Reservoir 43,642 acre-feet Storage began 1939
820
805
East Fork
907
869.9
San Jose Creek
Powerhouse diversion
Little Dalton Creek
Big Dalton Creek
Big Dalton Flood-Control Reservoir 869 acre-feet
PACIFIC OCEAN
Coyote Creek
885
Brea Flood-Control Reservoir 4,100 acre-feet
Brea Creek
Diversion Dam
863
San Dimas Flood-Control Reservoir 729 acre-feet
San Dimas Creek
902
895
Fullerton Flood-Control Reservoir 706 acre-feet
Fullerton Creek
Walnut Creek
Puddingstone Reservoir 17,090 acre-feet Storage began 1928
Live Oak Flood-Control Reservoir 243 acre-feet

Figure 6.--Schematic diagram showing diversions and storage in San Gabriel and Los Angeles River basins.

11080500 EAST FORK SAN GABRIEL RIVER NEAR CAMP BONITA, CA

LOCATION.--Lat 34°14'09", long 117°48'18", in NE¼NE¼ sec.27, T.2 N., R.9 W., Los Angeles County, Hydrologic Unit 18070106, on right bank 1,600 ft (490 m) upstream from mouth of Graveyard Canyon, 2.5 mi (4.0 km) upstream from confluence with West Fork, and 2.5 mi (4.0 km) west of Camp Bonita.

DRAINAGE AREA.--84.6 mi^2 (219.1 km^2).

PERIOD OF RECORD.--December 1932 to current year. Prior to 1940, published as San Gabriel River near Camp Bonita.

GAGE.--Water-stage recorder. Datum of gage is 1,567.04 ft (477.634 m) National Geodetic Vertical Datum of 1929 (levels by Los Angeles County Flood Control District). Prior to Dec. 10, 1938, at site 0.6 mi (1.0 km) downstream at different datum.

REMARKS.--Records fair. No regulation or diversion above station. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records were furnished by Los Angeles County Flood Control District.

AVERAGE DISCHARGE.--46 years (water years 1934-79), 72.8 ft^3/s (2.062 m^3/s), 52,740 acre-ft/yr (65.0 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,000 ft^3/s (1,300 m^3/s) Mar. 2, 1938, from rating curve extended above 21,300 ft^3/s (603 m^3/s), computed by Geological Survey; minimum 1.5 ft^3/s (0.042 m^3/s) Oct. 1, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,210 ft^3/s (34.3 m^3/s) Mar. 27, gage height, 16.94 ft (5.163 m); minimum daily, 24.0 ft^3/s (0.68 m^3/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	30	34	49	156	193	356	265	164	68	49	38
2	49	30	35	49	132	167	351	265	162	65	48	38
3	45	29	34	49	109	156	338	261	159	65	47	37
4	40	28	33	49	100	152	329	265	159	65	45	35
5	38	29	33	97	98	152	334	268	155	65	44	33
6	35	30	33	138	95	163	334	268	152	65	46	33
7	34	29	31	98	100	181	316	265	150	65	48	33
8	33	29	30	83	103	197	312	261	143	63	48	34
9	30	29	30	79	109	214	312	254	138	58	48	33
10	29	33	30	75	119	214	398	247	135	58	48	32
11	28	47	30	77	128	218	285	237	135	58	46	31
12	28	42	30	98	138	218	281	194	133	58	45	31
13	25	42	30	92	142	231	285	192	123	58	45	31
14	29	39	30	92	235	214	290	189	123	56	45	31
15	30	38	30	169	235	206	303	189	126	56	45	29
16	30	35	30	163	218	197	312	192	111	58	45	27
17	29	34	66	128	206	210	298	192	104	56	43	27
18	30	33	229	122	197	189	290	192	102	56	42	27
19	30	34	128	106	189	214	281	189	98	56	41	27
20	31	34	79	100	181	193	276	187	95	56	41	27
21	30	45	64	95	266	181	276	187	98	56	40	27
22	30	43	58	89	189	170	272	184	98	56	40	27
23	30	40	56	86	185	167	268	182	95	56	40	26
24	30	38	54	83	170	167	268	179	95	54	40	25
25	30	37	54	89	167	170	265	179	91	54	41	25
26	28	35	54	81	167	177	268	177	84	56	41	25
27	28	34	54	77	159	383	276	174	79	56	39	25
28	28	33	54	75	156	415	276	172	81	53	39	25
29	28	33	53	70	---	312	272	174	81	51	39	25
30	28	33	51	73	---	351	276	174	79	50	38	24
31	29	---	51	132	---	347	---	169	---	49	37	---
TOTAL	996	1045	1608	2863	4449	6719	8998	6523	3548	1796	1343	888
MEAN	32.1	34.8	51.9	92.4	159	217	300	210	118	57.9	43.3	29.6
MAX	54	47	229	169	266	415	398	268	164	68	49	38
MIN	25	28	30	49	95	152	265	169	79	49	37	24
AC-FT	1980	2070	3190	5680	8820	13330	17850	12940	7040	3560	2660	1760

CAL YR 1978 TOTAL 111604 MEAN 306 MAX 6360 MIN 25 AC-FT 221400
WTR YR 1979 TOTAL 40776 MEAN 112 MAX 415 MIN 24 AC-FT 80880

11082800 SAN GABRIEL RIVER AT AZUSA POWERHOUSE, AT AZUSA, CA

WATER-QUALITY RECORDS

LOCATION.--Lat 34°09'18", long 117°54'26", in NE¼SE¼ sec.22, T.1 N., R.10 W., Los Angeles County, Hydrologic Unit 18070106, at tailrace of Azusa Powerhouse, and 1.0 mi (1.6 km) north of Azusa.

PERIOD OF RECORD.--Water years 1908 to 1909, 1967 to current year.
CHEMICAL ANALYSES: Water years 1908 to 1909, 1967 to current year.

COOPERATION.--Chemical-quality records were furnished by California Department of Water Resources; records of discharge were furnished by Los Angeles County Flood Control District.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT											
23...	1610	74	350	8.2	17.0	2	8.9	170	48	11	12
DEC											
01...	1155	74	360	8.2	10.0	2	10.9	180	56	11	11
15...	1420	74	400	8.4	7.5	4	11.7	190	56	12	11
JAN											
26...	1610	75	320	8.3	8.0	7	12.0	150	43	10	9.0
MAR											
01...	1020	73	310	8.6	9.0	0	11.4	140	41	9.0	8.0
27...	1010	73	300	8.3	10.5	3	10.8	150	44	9.0	8.0
APR											
20...	1535	73	290	8.5	12.0	1	10.4	140	41	9.0	8.0
MAY											
15...	1520	73	--	--	13.5	--	--	--	--	--	--
JUN											
18...	1510	73	310	7.6	18.0	2	9.5	150	45	9.0	8.0
JUL											
16...	1615	73	380	8.0	21.0	1	8.7	150	45	10	8.0

DATE	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)
OCT										
23...	13	.4	3.0	170	19	3.6	.5	183	.27	1.2
DEC										
01...	11	.4	4.0	180	24	3.9	.4	207	.54	2.4
15...	11	.3	4.0	180	25	4.1	.3	208	.27	1.2
JAN										
26...	11	.3	3.0	140	21	2.9	.3	183	.95	4.2
MAR										
01...	11	.3	2.0	140	21	4.0	.4	163	.54	2.4
27...	10	.3	2.0	140	18	3.0	.3	176	.14	.60
APR										
20...	11	.3	2.0	130	17	2.0	.3	169	.54	2.4
MAY										
15...	--	--	--	--	--	--	--	--	--	--
JUN										
18...	10	.3	3.0	150	18	2.0	.3	196	.34	1.5
JUL										
16...	10	.3	3.0	150	21	2.0	.3	203	.34	1.5

DATE	TIME	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT									
23...	1610	--	0	--	--	--	--	--	--
DEC									
01...	1155	--	0	--	--	--	--	--	--
15...	1420	--	100	--	--	--	--	--	--
JAN									
26...	1610	--	100	--	--	--	--	--	--
MAR									
01...	1020	--	0	--	--	--	--	--	--
27...	1010	--	100	--	--	--	--	--	--
APR									
20...	1535	--	0	--	--	--	--	--	--
MAY									
15...	1520	0	--	10	0	10	0	.0	0
JUN									
18...	1510	--	0	--	--	--	--	--	--
JUL									
16...	1615	--	0	--	--	--	--	--	--

11084500 FISH CREEK NEAR DUARTE, CA

LOCATION.--Lat 34°09'57", long 117°55'24", in SW¼SW¼SW¼ sec.15, T.1 N., R.10 W., Los Angeles County, Hydrologic Unit 18070106, on left bank 0.8 mi (1.3 km) upstream from mouth of canyon, and 3.2 mi (5.1 km) northeast of Duarte.

DRAINAGE AREA.--6.36 mi² (16.47 km²).

GAGE.--Water-stage recorder. Broad-crested weir since July 1917, restored in December 1938. Datum of gage is 905.9 ft (276.12 m) National Geodetic Vertical Datum of 1929. See WSP 1315-B for history of changes prior to Dec. 7, 1938. Dec. 7, 1938, to Oct. 3, 1951, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records fair. No regulation or diversion above station. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records were furnished by Los Angeles County Flood Control District.

AVERAGE DISCHARGE.--62 years (water years 1918-79), 4.64 ft³/s (0.131 m³/s), 3,360 acre-ft/yr (4.14 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s (368 m³/s) Jan. 25, 1969, gage height, 11.98 ft (3.652 m), from inside gage, from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of slope-area measurement of maximum flow; maximum gage height, about 14.5 ft (4.42 m) Feb. 11, 16, 1959 (from debris wave); no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 78 ft³/s (2.21 m³/s) Jan. 17, gage height, 2.75 ft (0.838 m); minimum daily, 0.25 ft³/s (0.007 m³/s) Aug. 23-29, Sept. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.3	1.3	1.1	35	22	17	3.0	1.3	1.3	.65	.30
2	1.2	1.3	1.3	1.4	24	18	16	3.0	1.3	1.0	.70	.25
3	1.2	1.2	1.3	1.9	21	15	14	3.0	1.2	1.0	.65	.25
4	1.2	1.0	1.3	2.1	17	13	13	2.9	1.2	1.0	.65	.30
5	1.2	.94	1.3	22	15	11	12	2.6	1.2	1.0	.65	.30
6	1.3	.94	1.3	26	13	8.5	12	3.7	1.3	.94	.60	.30
7	1.3	.86	1.6	8.0	11	8.3	13	3.8	1.6	.94	.50	.30
8	1.1	.86	1.6	6.2	9.9	8.7	13	3.8	1.3	.70	.45	.30
9	1.0	.94	1.6	5.8	8.5	8.7	12	3.7	1.1	.85	.45	.30
10	1.0	2.5	1.7	5.2	6.2	8.5	11	3.4	1.3	.65	.45	.35
11	.86	3.8	1.6	5.2	4.9	8.3	10	2.6	1.3	.70	.45	.35
12	1.0	2.4	1.6	5.1	7.0	7.2	11	2.0	1.2	.85	.55	.35
13	1.3	1.9	1.5	4.6	5.8	8.1	10	2.5	1.2	.78	.65	.35
14	1.3	1.9	1.5	4.8	12	9.4	10	2.0	1.1	.78	.65	.35
15	1.3	1.5	1.4	26	7.2	8.5	10	1.9	1.2	.78	.55	.35
16	1.3	1.4	1.4	35	6.0	5.5	10	1.9	1.3	.65	.40	.35
17	1.3	1.3	11	20	5.4	4.9	10	2.0	1.3	.94	.40	.35
18	1.3	1.3	14	16	5.1	4.0	9.6	2.0	1.4	1.0	.40	.35
19	1.3	1.3	10	9.4	4.9	8.1	9.2	2.0	1.2	1.0	.40	.35
20	1.3	1.2	2.1	6.0	6.0	7.4	8.7	2.0	1.0	1.3	.40	.35
21	1.3	2.4	1.7	5.2	32	5.8	6.6	2.0	1.0	1.4	.40	.40
22	1.3	2.3	1.5	5.1	23	5.2	3.3	1.9	.94	1.2	.30	.40
23	1.3	1.9	1.5	4.8	23	4.6	3.3	1.8	.94	1.2	.25	.40
24	1.3	1.5	1.3	4.4	21	4.3	3.3	1.8	.94	1.1	.25	.35
25	1.3	2.4	1.3	4.6	19	3.7	3.1	1.7	.94	1.0	.25	.35
26	1.3	1.8	1.1	4.1	18	3.4	3.0	1.7	.78	.94	.25	.35
27	1.3	1.4	1.1	4.1	18	20	2.9	1.8	.65	.94	.25	.35
28	1.3	1.3	1.1	4.0	17	23	3.0	1.6	.70	.78	.25	.35
29	1.3	1.2	1.1	3.8	---	23	3.0	1.6	1.2	.70	.25	.35
30	1.3	1.2	1.1	6.4	---	21	2.9	1.5	1.2	.70	.30	.40
31	1.3	---	1.0	33	---	19	---	1.5	---	.70	.35	---
TOTAL	38.16	47.24	74.2	291.3	395.9	326.1	265.9	72.7	34.29	28.62	13.70	10.15
MEAN	1.23	1.57	2.39	9.40	14.1	10.5	8.86	2.35	1.14	.92	.44	.34
MAX	1.3	3.8	14	35	35	23	17	3.8	1.6	1.4	.70	.40
MIN	.86	.86	1.0	1.1	4.9	3.4	2.9	1.5	.65	.65	.25	.25
AC-FT	76	94	147	578	785	647	527	144	68	57	27	20

CAL YR 1978 TOTAL 5829.10 MEAN 16.0 MAX 386 MIN .86 AC-FT 11560
WTR YR 1979 TOTAL 1598.16 MEAN 4.38 MAX 35 MIN .25 AC-FT 3170

11085000 SAN GABRIEL RIVER BELOW SANTA FE DAM, NEAR BALDWIN PARK, CA

LOCATION.--Lat 34°06'44", long 117°58'07", in SE¼NE¼SW¼ sec.6, T.1 S., R.10 W., Los Angeles County, Hydrologic Unit 18070106, on left bank at stilling basin of outlet of Santa Fe flood-control dam, 500 ft (150 m) downstream from axis of dam, and 1.7 mi (2.7 km) north of Baldwin Park.

DRAINAGE AREA.--236 mi² (611 km²).

PERIOD OF RECORD.--October 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft (121.920 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair. Flow regulated by Cogswell and San Gabriel flood-control reservoirs, combined capacity, 53,870 acre-ft (66.4 hm³), Morris Reservoir, capacity, 35,000 acre-ft (43.2 hm³), and Santa Fe flood-control reservoir, capacity, 32,640 acre-ft (40.2 hm³). Diversions above station for irrigation, power development, and ground-water replenishment. At times water diverted from side of stilling basin to headwaters of Rio Hondo; 12,100 acre-ft (14.9 hm³) were diverted during current year. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records of diversions to Rio Hondo were furnished by Los Angeles County Flood Control District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,900 ft³/s (875 m³/s) Jan. 26, 1969, gage height, 22.20 ft (6.767 m); no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 480 ft³/s (13.6 m³/s) May 1, gage height, 12.11 ft (3.691 m); no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	69	225	80	225	218			
2				0	65	162	68	199	214			
3				0	56	101	63	201	208			
4				0	29	44	72	192	204			
5				0	9.7	6.7	79	188	202			
6				0	8.5	22	82	187	202			
7				0	10	58	86	184	133			
8				0	10	54	88	182	16			
9				45	8.6	54	120	147	.01			
10				109	7.7	53	160	155	0			
11				108	7.1	49	160	159	0			
12				108	6.4	44	160	160	0			
13				108	5.9	43	160	160	0			
14				108	9.4	43	160	159	0			
15				107	10	41	159	160	0			
16				107	5.9	41	156	180	0			
17				105	2.9	42	160	250	0			
18				50	1.8	42	163	282	0			
19				2.3	1.2	42	165	267	0			
20				2.0	.84	44	165	256	0			
21				1.4	38	45	163	249	0			
22				1.0	23	46	159	242	0			
23				107	14	50	155	237	0			
24				107	8.8	50	149	237	0			
25				2.0	7.9	50	144	240	0			
26				50	26	50	141	236	0			
27				74	70	52	147	236	0			
28				72	179	52	165	233	0			
29				69	---	75	177	230	0			
30				66	---	92	215	224	0			
31		---		70	---	86	---	220	---			---
TOTAL	0	0	0	1578.7	691.64	1858.7	4121	6477	1397.01	0	0	0
MEAN	0	0	0	50.9	24.7	60.0	137	209	46.6	0	0	0
MAX	0	0	0	109	179	225	215	282	218	0	0	0
MIN	0	0	0	0	.84	6.7	63	147	0	0	0	0
AC-FT	0	0	0	3130	1370	3690	8170	12850	2770	0	0	0

CAL YR 1978 TOTAL 136553.83 MEAN 374 MAX 12800 MIN 0 AC-FT 270900
WTR YR 1979 TOTAL 16124.05 MEAN 44.2 MAX 282 MIN 0 AC-FT 31980

11087020 SAN GABRIEL RIVER ABOVE WHITTIER NARROWS DAM, CA

LOCATION.--Lat 34°02'00", long 118°02'14", in La Puente Grant, Los Angeles County, Hydrologic Unit 18070106, on downstream side of bridge near center on Peck Road, 0.8 mi (1.3 km) downstream from San Jose flood channel, 1.2 mi (1.9 km) upstream from axis of Whittier Narrows Dam, and 1.8 mi (2.9 km) south of El Monte.

DRAINAGE AREA.--353 mi² (914 km²).

PERIOD OF RECORD.--October 1955 to September 1957, October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 220 ft (67 m), from topographic map.

REMARKS.--Records good. Flow regulated by San Gabriel, Cogswell, and Santa Fe flood-control reservoirs, combined capacity, 90,670 acre-ft (112 hm³), several small flood-control reservoirs, combined capacity, 19,100 acre-ft (23.6 hm³), and Morris Reservoir, capacity, 35,000 acre-ft (43.2 hm³). Many diversions above station for irrigation, power development, and ground-water replenishment. Colorado River water released to the San Gabriel River at a site 14.9 mi (24.0 km) upstream from gage, at Metropolitan Water District aqueduct crossing on San Dimas Creek for ground-water replenishment. 12,100 acre-ft (14.9 hm³) were diverted by Los Angeles County Flood Control District from San Gabriel River below Santa Fe Dam to Rio Hondo during current year. 4,120 acre-ft (5.08 hm³) were released from Puddingstone Reservoir during current year. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records of diversion to Rio Hondo and from Puddingstone Reservoir were furnished by Los Angeles County Flood Control District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,600 ft³/s (1,320 m³/s) Jan. 25, 1969, gage height, 10.90 ft (3.322 m); no flow for part of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,230 ft³/s (403 m³/s) Jan. 30, gage height, 7.61 ft (2.320 m); minimum daily, 4.6 ft³/s (0.13 m³/s) June 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	220	220	190	98	529	559	94	22	41	115	204	197
2	102	220	190	102	559	94	102	57	44	115	204	197
3	190	227	220	102	149	50	98	41	41	124	212	197
4	212	227	220	81	119	41	98	36	36	190	212	190
5	212	220	220	1100	106	29	94	29	31	190	204	197
6	212	227	220	1080	40	22	94	31	31	110	204	190
7	220	220	220	22	20	25	94	31	36	110	204	197
8	220	160	220	17	22	25	94	26	17	110	197	197
9	220	227	227	41	33	25	94	20	9.8	106	197	190
10	220	288	220	17	38	17	94	14	11	106	197	190
11	212	297	227	17	36	15	90	14	6.8	106	204	190
12	212	85	227	17	33	14	41	12	6.8	119	204	197
13	212	178	227	15	36	190	22	12	5.3	197	204	197
14	212	102	227	178	172	29	18	11	4.6	204	197	197
15	212	212	227	1970	33	15	17	11	6.0	204	197	197
16	220	220	235	204	26	15	17	11	8.7	212	197	197
17	220	227	1780	124	17	370	15	11	9.8	212	197	197
18	212	252	1150	144	25	731	17	38	9.8	204	197	166
19	184	252	317	53	300	993	14	50	8.7	212	197	144
20	76	252	15	40	60	85	17	53	7.7	212	197	139
21	220	993	12	40	50	31	25	53	6.8	212	64	144
22	212	110	11	40	43	22	25	53	6.8	212	11	172
23	212	22	11	38	35	17	25	41	11	212	9.8	197
24	220	94	9.8	38	35	15	14	41	46	212	25	197
25	220	220	11	37	35	15	11	41	155	212	98	190
26	220	178	9.8	37	36	15	15	44	160	212	102	190
27	227	178	11	37	31	3410	18	44	190	204	144	190
28	220	175	9.8	70	31	769	18	50	160	204	190	190
29	220	172	9.8	40	---	359	18	50	111	204	190	197
30	244	172	90	1970	---	129	20	47	111	204	190	197
31	227	---	98	3680	---	102	---	47	---	204	190	---
TOTAL	6442	6627	7062.2	11449	2649	8228	1413	1041	1329.6	5450	5239.8	5627
MEAN	208	221	228	369	94.6	265	47.1	33.6	44.3	176	169	188
MAX	244	993	1780	3680	559	3410	102	57	190	212	212	197
MIN	76	22	9.8	15	17	14	11	11	4.6	106	9.8	139
AC-FT	12780	13140	14010	22710	5250	16320	2800	2060	2640	10810	10390	11160

CAL YR 1978 TOTAL 230130.2 MEAN 630 MAX 23000 MIN 9.8 AC-FT 456500
WTR YR 1979 TOTAL 62557.6 MEAN 171 MAX 3680 MIN 4.6 AC-FT 124100

11087040 SAN GABRIEL RIVER AT WHITTIER NARROWS, CA

WATER-QUALITY RECORDS

LOCATION.--Lat 34°01'25", long 118°03'11", in sec.5, T.2 S., R.11 W., Los Angeles County, Hydrologic Unit 18070106, 200 ft (60 m) southeast from end of San Gabriel Boulevard (Siphon Road), 1,000 ft (300 m) upstream from Whittier Narrows Dam, and 2.5 mi (4.0 km) northeast of Montebello.

PERIOD OF RECORD.--Water years 1967 to current year.
CHEMICAL ANALYSES: Water years 1967 to current year.

REMARKS.--Records of discharge are given for San Gabriel River above Whittier Narrows Dam (station 11087020), 1.2 mi (1.9 km) upstream.

COOPERATION.--Chemical-quality records were furnished by California Department of Water Resources.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT											
23...	1350	204	480	8.9	21.0	3	10.1	120	50	72	302
NOV											
27...	1750	172	450	8.3	13.5	15	10.0	120	44	54	262
DEC											
15...	1240	235	410	9.4	11.0	7	15.9	110	44	50	220
JAN											
26...	1425	37	1020	8.7	15.5	0	11.7	360	210	100	708
MAR											
01...	1655	500	140	8.4	11.5	90	10.4	43	18	6.0	64
27...	1610	4060	140	8.1	14.0	240	9.8	69	16	5.0	88
APR											
20...	1350	18	960	9.3	24.0	4	14.6	370	230	110	757
JUN											
18...	1650	6.8	990	8.7	22.0	2	12.2	370	220	110	830
JUL											
16...	1245	212	510	8.7	26.0	2	9.1	140	67	63	362

11088000 SAN GABRIEL RIVER AT SPRING STREET, NEAR LOS ALAMITOS, CA

LOCATION.--Lat 33°48'43", long 118°05'24", in SE¼SE¼NW¼ sec.24, T.4 S., R.12 W., Los Angeles County, Hydrologic Unit 18070106, on right levee 455 ft (140 m) upstream from Spring Street bridge, 1.3 mi (2.1 km) upstream from Coyote Creek, and 1.3 mi (2.1 km) northwest of Los Alamitos.

DRAINAGE AREA.--472 mi^2 (1,222 km^2).

PERIOD OF RECORD.--October 1927 to September 1951, October 1952 to September 1977, December 1978 to September 1979. Monthly discharge only for October 1927 to September 1936, published in WSP 1315-B.

GAGE.--Water-stage recorder. Datum of gage is 11.87 ft (3.618 m) National Geodetic Vertical Datum of 1929 (levels by Los Angeles County Flood Control District). Prior to October 1952, at datum 4.82 ft (1.469 m) higher and from October 1952 to Nov. 17, 1964, at datum 0.38 ft (0.116 m) higher.

REMARKS.--Records poor. Period of no gage-height record, October 1 to November 30, not estimated by cooperator. Regulation and diversions same as station 11087500. Additional diversion to percolation basin near Washington Boulevard and percolation basins in streambed. AVERAGE DISCHARGE represents flow to ocean during period of record regardless of upstream development. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records were furnished by Los Angeles County Flood Control District.

AVERAGE DISCHARGE.--49 years (water years 1951-77), 31.7 ft^3/s (0.898 m^3/s), 22,970 acre-ft/yr (28.3 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,000 ft^3/s (765 m^3/s), estimated, Mar. 2, 1938; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,780 ft^3/s (135 m^3/s) Jan. 31, gage height, 6.59 ft (2.009 m); minimum daily, undetermined.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			77	20	337	149	71	34	43	63	37	41
2			75	21	280	71	72	50	44	29	26	34
3			50	26	185	62	69	59	29	31	27	25
4			37	55	122	60	63	43	32	39	30	27
5			68	238	94	63	64	46	37	46	25	31
6			76	431	78	43	63	29	51	64	29	50
7			57	64	61	35	65	34	48	43	34	48
8			63	63	66	55	62	34	64	38	43	45
9			71	91	64	47	67	37	55	31	29	34
10			49	75	65	60	72	47	34	37	33	34
11			38	73	61	31	71	50	38	60	38	57
12			56	76	66	26	76	53	34	41	25	54
13			74	74	47	112	73	36	32	31	28	55
14			65	78	124	61	70	37	37	30	29	47
15			69	338	77	54	65	50	52	27	42	39
16			70	476	77	53	59	50	70	32	38	30
17			290	88	76	119	50	57	64	33	27	31
18			380	113	49	61	53	59	52	35	35	31
19			310	108	38	241	51	50	59	33	24	50
20			85	74	52	113	53	34	70	40	27	47
21			58	66	191	61	42	37	52	46	37	44
22			55	74	191	55	26	41	52	25	28	35
23			56	74	185	57	25	48	50	39	34	25
24			31	75	94	55	32	47	27	31	28	29
25			32	76	63	55	31	59	30	34	42	38
26			29	76	66	62	34	48	29	45	24	31
27			22	75	69	740	32	25	37	47	30	28
28			25	74	68	111	40	26	55	43	29	37
29			24	74	---	158	27	29	65	26	43	33
30			22	632	---	92	31	37	63	28	43	20
31			23	1220	---	78	---	50	---	32	48	---
TOTAL	---		2437	5098	2946	3040	16[illegible]9	1336	1405	1129	1012	1130
MEAN	---		78.6	164	105	98.1	5[illegible]	43.1	46.8	36.4	32.6	37.7
MAX	---		380	1220	337	740	[illegible]6	59	70	64	48	57
MIN	---		22	20	38	26	25	25	27	25	24	20
AC-FT	---		4830	10110	5840	6030	3190	2650	2790	2240	2010	2240

11088500 BREA CREEK BELOW BREA DAM, NEAR FULLERTON, CA

LOCATION.--Lat 33°53'10", long 117°55'32", in NE¼NE¼NE¼ sec.28, T.3 S., R.10 W., Orange County, Hydrologic Unit 18070106, on right bank 0.2 mi (0.3 km) downstream from Brea Dam, and 1 mi (2 km) north of Fullerton.

DRAINAGE AREA.--21.6 mi^2 (55.9 km^2).

PERIOD OF RECORD.--January 1942 to current year.

GAGE.--Water-stage recorder. V-notch sharp-crested weir since October 1946. Datum of gage is 196.67 ft (59.945 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Dec. 4, 1964, at datum 1.03 ft (0.314 m) higher.

REMARKS.--Records poor. Flow regulated by Brea flood-control reservoir, capacity, 4,100 acre-ft (506 hm^3). No diversion above station. Since August 1966 low flow mostly the result of irrigation waste water from golf course 0.8 mi (1.3 km) upstream. See schematic diagram of San Gabriel and Los Angeles River basins.

AVERAGE DISCHARGE.--37 years, 1.91 ft^3/s (0.054 m^3/s), 1,380 acre-ft/yr (1.70 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft^3/s (33.7 m^3/s) Jan. 31, 1979, gage height unknown, from release records of Brea Dam as furnished by Corps of Engineers; no flow for parts of some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,190 ft^3/s (33.7 m^3/s) Jan. 31, gage height, unknown, from release records of Brea Dam as furnished by Corps of Engineers; minimum daily, 0.06 ft^3/s (0.002 m^3/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.30	1.7	.85	480	25	3.9	1.9	1.8	.55	.39	.61
2	.07	.28	5.3	.82	280	13	3.5	1.9	2.1	.48	.39	.30
3	.13	.34	3.9	.80	60	10	3.2	1.8	1.7	.48	.53	.55
4	.15	.30	2.6	.76	24	9.1	3.4	1.7	1.6	.48	.62	.54
5	.13	.33	1.7	.83	6.8	8.8	3.6	1.6	1.5	.48	.77	.44
6	.12	.32	1.7	190	6.6	8.4	3.7	1.5	.77	.45	.63	.80
7	.12	.37	1.3	14	6.6	8.0	3.7	1.4	1.0	.45	.45	.43
8	.13	.32	1.0	6.4	6.4	7.7	3.7	1.5	.80	.45	.29	.41
9	.13	.27	1.2	4.3	6.3	7.4	3.7	1.4	.92	.45	.47	.43
10	.13	23	2.9	3.3	6.2	7.2	3.7	1.3	.87	.45	.26	.44
11	.14	52	1.5	1.4	6.2	7.0	3.4	1.2	.90	.43	.26	1.2
12	.13	43	.76	1.3	6.2	6.8	3.4	1.1	.88	.43	.39	.53
13	.12	41	.67	1.1	6.2	6.6	3.4	1.1	.99	.43	.40	.72
14	.12	43	.44	8.2	32	6.4	3.4	1.0	.69	.43	.38	.35
15	.14	38	.37	153	9.0	6.3	3.4	1.0	.62	.43	.29	1.2
16	.15	34	1.4	56	6.7	6.2	2.8	1.0	.53	.41	.29	1.7
17	.15	33	134	22	6.5	38	2.8	1.4	.92	.41	.24	1.3
18	.19	31	113	11	6.3	27	2.8	1.3	.85	.41	.30	1.5
19	.20	20	47	2.9	6.1	77	2.8	1.5	.74	.41	.31	1.2
20	.32	24	16	2.0	5.9	12	2.9	1.0	.64	.41	.34	1.1
21	.27	78	6.4	1.9	160	10	2.5	.97	.48	.40	.31	.90
22	.24	45	3.6	1.8	14	9.0	2.5	1.0	.56	.40	.62	.42
23	.26	24	1.9	2.0	42	8.2	2.5	1.0	.53	.40	.41	.50
24	.25	11	1.5	1.7	15	7.6	2.5	.97	.46	.40	.42	.40
25	.25	7.6	1.4	1.8	11	7.2	2.5	1.2	.54	.40	.38	.62
26	.37	5.3	1.3	1.9	12	7.0	2.1	1.6	.67	.40	.45	.35
27	.32	4.6	1.2	1.6	8.9	140	2.1	.95	.71	.40	.43	.37
28	.30	3.9	1.1	10	9.4	70	2.1	1.0	.56	.40	.44	.21
29	.29	2.6	1.0	3.6	---	20	2.1	1.1	.56	.40	.45	.29
30	.30	1.7	.95	164	---	3.6	2.1	1.2	.71	.40	.84	.17
31	.39	---	.88	551	---	4.5	---	1.1	---	.40	.28	---
TOTAL	6.03	576.53	354.57	1222.26	1086.3	585.0	90.1	39.69	26.68	13.32	13.02	20.12
MEAN	.19	19.2	11.4	39.4	38.8	18.9	3.00	1.28	.89	.43	.42	.67
MAX	.37	78	134	551	480	140	3.9	1.9	2.1	.55	.84	1.7
MIN	.06	.27	.37	.76	5.9	3.6	2.1	.95	.46	.40	.24	.17
AC-FT	12	1140	713	2420	2150	1160	179	79	53	26	26	40

CAL YR 1978 TOTAL 6273.43 MEAN 17.2 MAX 710 MIN .01 AC-FT 12440
WTR YR 1979 TOTAL 4036.72 MEAN 11.1 MAX 551 MIN .06 AC-FT 8010

11089500 FULLERTON CREEK BELOW FULLERTON DAM, NEAR BREA, CA

LOCATION.--Lat 33°53'45", long 117°53'07", in NE¼NW¼SW¼ sec.24, T.3 S., R.10 W., Orange County, Hydrologic Unit 18070106, on left bank of outlet channel of Fullerton Dam, 1.0 mi (2.6 km) southeast of Brea.

DRAINAGE AREA.--4.94 mi² (12.79 km²).

PERIOD OF RECORD.--October 1941 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 250 ft (76 m), from topographic map. V-notch sharp-crested weir used Oct. 25, 1946, to Feb. 2, 1956. Prior to Dec. 3, 1971, at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records good. Flow regulated by Fullerton flood-control reservoir, capacity, 706 acre-ft (870,000 m³). Small tributary formerly entering below station diverted into reservoir since December 1954. See schematic diagram of San Gabriel and Los Angeles River basins.

AVERAGE DISCHARGE.--13 years (water years 1942-54), 0.19 ft³/s (0.005 m³/s), 135 acre-ft/yr (166,000 m³/yr); 25 years (water years 1955-79), 0.81 ft³/s (0.023 m³/s), 587 acre-ft/yr (724,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 313 ft³/s (8.86 m³/s) Jan. 25, 1969, gage height, 7.32 ft (2.231 m), present datum; no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 296 ft³/s (8.38 m³/s) Jan. 31, gage height, 7.65 ft (2.332 m); minimum daily, 0.01 ft³/s (<0.001 m³/s) July 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	.25	.15	.19	73	9.5	.32	.18	.02	.04	.47	.25
2	.25	.21	.15	.11	11	.61	.26	.19	.03	.04	.55	.25
3	.29	.19	.10	.42	1.1	.31	.21	.19	.04	.02	.48	.27
4	.30	.19	.09	.28	.49	.35	.19	.19	.04	.01	.47	.25
5	.28	.19	.07	26	.36	.43	.24	.19	.04	.59	.47	.25
6	.31	.19	.06	86	.31	.33	.25	.19	.04	.54	.50	.29
7	.31	.21	.03	19	.31	.31	.25	.19	.04	.14	.47	.31
8	.31	.34	.02	.42	.31	.39	.25	.17	.04	.11	.38	.31
9	.31	.36	.02	2.2	.51	.32	.25	.16	.04	.55	.46	.31
10	.31	1.9	.02	.37	.40	.31	.25	.14	.04	.26	.47	.35
11	.24	4.6	.02	.38	.35	.31	.27	.14	.04	.30	.47	.38
12	.30	1.8	.02	.51	.32	.31	.29	.14	.04	.50	.50	.38
13	.29	1.6	.02	.25	.31	1.6	.29	.14	.04	.41	.51	.38
14	.31	1.3	.02	4.0	3.7	.41	.31	.14	.04	.13	.47	.38
15	.25	.62	.02	75	.32	.28	.28	.14	.04	.10	.47	.38
16	.30	.51	.02	4.2	.31	.27	.30	.13	.04	.92	.47	.38
17	.34	.60	1.3	2.1	.31	15	.31	.07	.04	.60	.47	.38
18	.31	.19	44	2.3	.25	2.7	.25	.05	.04	.56	.47	.38
19	.25	.19	42	.51	.67	42	.25	.07	.03	.56	.47	.38
20	1.3	.47	.83	.34	1.3	2.2	.25	.05	.04	.56	.47	.38
21	.30	19	.40	.31	33	.87	.30	.04	.04	.56	.47	.38
22	.24	5.6	.33	.34	1.1	.45	.30	.04	.04	.56	.51	.38
23	.20	1.7	.39	.35	10	.34	.28	.04	.04	.56	.47	.38
24	.28	.90	.31	.30	.34	.31	.30	.04	.04	.56	.68	.38
25	.25	.08	.31	.25	.31	.31	.30	.05	.04	.56	.77	.38
26	.27	.04	.33	.25	.26	.31	.19	.06	.04	.60	.77	.38
27	.25	.67	.78	.25	.25	76	.15	.07	.04	.47	.77	.38
28	.28	.71	.42	1.3	.28	19	.19	.07	.04	.38	.47	.38
29	.25	.67	.29	.54	---	8.9	.19	.08	.04	.38	.45	.35
30	.32	.48	.25	25	---	.44	.19	.07	.04	.46	.32	.31
31	.42	---	.20	206	---	.61	---	.05	---	.47	.27	---
TOTAL	10.03	45.56	92.97	459.45	141.17	184.28	7.66	3.45	1.16	12.63	15.42	10.34
MEAN	.32	1.52	3.00	14.8	5.04	5.94	.26	.11	.039	.41	.50	.34
MAX	1.3	19	44	206	73	76	.32	.19	.04	.92	.77	.38
MIN	.20	.04	.02	.11	.25	.27	.15	.04	.02	.01	.27	.25
AC-FT	20	90	184	911	280	366	15	6.8	2.3	25	31	21

CAL YR 1978 TOTAL 1622.21 MEAN 4.44 MAX 160 MIN .02 AC-FT 3220
WTR YR 1979 TOTAL 984.12 MEAN 2.70 MAX 206 MIN .01 AC-FT 1950

11090200 FULLERTON CREEK AT RICHMAN AVENUE, AT FULLERTON, CA

LOCATION.--Lat 33°51'45", long 117°55'55", in NW¼SW¼SE¼ sec.33, T.3 S., R.10 W., Orange County, Hydrologic Unit 18070106, on right bank 125 ft (38 m) east of Richman Avenue, at Fullerton.

DRAINAGE AREA.--12.1 mi² (31.3 km²).

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 126.4 ft (38.53 m) National Geodetic Vertical Datum of 1929 (levels by Orange County Environmental Management Agency).

REMARKS.--Flow regulated by Fullerton flood-control reservoir, capacity, 706 acre-ft (870,000 m³). No diversion above station. See schematic diagram of San Gabriel and Los Angeles River basins. Record for 1978 water year not published due to lack of data.

COOPERATION.--Records were furnished by Orange County Environmental Management Agency.

AVERAGE DISCHARGE.--18 years (water years 1960-77), 2.06 ft³/s (0.058 m³/s), 1,490 acre-ft/yr (1.84 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,040 ft³/s (57.8 m³/s) Jan. 6, 1979, gage height, 6.68 ft (2.036 m); no flow many days in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,040 ft³/s (57.8 m³/s) Jan. 6, gage height, 6.68 ft (2.036 m); minimum daily, 0.10 ft³/s (0.003 m³/s) many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.20	.10	.20	133	22	.40	.40	.50	.30	.30	.50
2	.10	.20	.10	.20	13	.80	.50	.20	.30	.20	.40	.50
3	.10	.10	.10	.40	8.0	.30	.40	.30	.30	.10	.20	.60
4	.10	.20	.10	.20	.70	.50	.40	.20	.40	.10	.40	.60
5	.10	.30	.10	242	.70	.50	.50	.20	.30	.10	.50	.60
6	.10	.10	.10	169	.60	.50	.50	.20	.20	.50	.50	.50
7	.10	.20	.10	.20	.60	.50	.50	.20	.10	.70	.50	.60
8	.10	.20	.10	.20	.50	.60	.50	.50	.10	.30	.40	.70
9	.10	.30	.10	24	.60	.50	.40	.30	.20	.30	.40	.60
10	.10	8.1	.10	.20	.60	.50	.50	.60	.20	1.0	.50	.60
11	.10	17	.10	.20	.60	.40	.40	.50	.20	2.1	.50	.80
12	.10	4.5	.10	.20	.50	.50	.60	.40	.30	.70	.50	.80
13	.10	19	.10	.20	.50	9.5	.60	.40	.30	.70	.60	.80
14	.10	2.0	.10	.20	23	.70	.60	.40	.30	.30	.60	.80
15	.10	.80	.10	140	.40	.40	.60	.40	.10	.20	.70	.80
16	.10	.10	.10	7.4	.30	.70	.60	.50	.10	.40	.70	.70
17	.10	.70	128	4.8	.30	63	.50	.50	.20	1.4	.70	.70
18	.10	.10	119	3.3	.30	13	.40	.30	.10	.80	.80	1.0
19	.10	.10	59	.70	1.4	107	.60	.40	.10	1.1	.70	1.0
20	2.3	.10	1.4	.40	17	14	.50	.40	.30	1.0	.70	1.0
21	.40	61	.70	.30	93	2.8	.50	.40	.10	1.0	.70	1.0
22	.10	25	.30	.30	3.3	.80	.50	.50	.10	1.0	.60	1.0
23	.10	1.4	.30	.30	39	.70	.50	.20	.10	1.0	.60	1.0
24	.40	.70	.30	.30	.50	.70	.50	.20	.20	.80	.60	.70
25	.20	.10	.20	.30	.40	.70	.40	.30	.10	.70	.70	.70
26	.10	.10	.30	.30	.40	.70	.40	.30	.10	.70	.70	.70
27	.10	.20	.60	.30	.40	213	.40	.30	.10	.60	.80	.60
28	.10	.20	.60	4.3	.40	59	.40	.40	.10	.60	.50	.60
29	.10	.10	.50	1.1	---	19	.40	.70	.20	.60	.70	.60
30	.30	.10	.30	396	---	.70	.40	.20	.40	.60	.70	.60
31	.40	---	.20	648	---	.50	---	.40	---	.40	.60	---
TOTAL	6.50	139.60	313.30	1645.50	340.00	534.50	14.40	11.20	6.10	20.30	17.80	21.70
MEAN	.21	4.65	10.1	53.1	12.1	17.2	.48	.36	.20	.65	.57	.72
MAX	2.3	61	128	648	133	213	.60	.70	.50	2.1	.80	1.0
MIN	.10	.10	.10	.20	.30	.30	.40	.20	.10	.10	.20	.50
AC-FT	13	277	621	3260	674	1060	29	22	12	40	35	43

WTR YR 1979 TOTAL 3070.90 MEAN 8.41 MAX 648 MIN .10 AC-FT 6090

11090700 COYOTE CREEK AT LOS ALAMITOS, CA

LOCATION.--Lat 33°48'38", long 118°04'28", in NW¼NE¼SW¼ sec.19, T.4 S., R.11 W., Orange County, Hydrologic Unit 18070106, on right bank about 250 ft (76 m) downstream from Spring Street, 0.5 mi (0.8 km) northwest of Los Alamitos.

DRAINAGE AREA.--150 mi^2 (389 km^2).

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WDR CA-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7.37 ft (2.246 m) National Geodetic Vertical Datum of 1929 (levels by Los Angeles County Flood Control District).

REMARKS.--Records poor. Flows up to 100 ft^3/s (2.83 m^3/s) can be diverted from present Carbon Creek channel to Coyote Creek through the original Carbon Creek channel. Flow partially regulated by Carbon Canyon, Brea and Fullerton flood-control reservoirs, combined capacity, 11,840 acre-ft (14.6 hm^3). AVERAGE DISCHARGE represents flow to ocean during period of record, regardless of upstream development. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records were furnished by Los Angeles County Flood Control District.

AVERAGE DISCHARGE.--15 years (water years 1964-78), 41.3 ft^3/s (1.170 m^3/s), 29,920 acre-ft/yr (36.9 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,300 ft^3/s (405 m^3/s) Dec. 4, 1974, gage height, 7.25 ft (2.210 m), from outside gage; no flow Jan. 25, Feb. 15-17, 1964.

NOTE.--Record for current year will not be published due to lack of data.

11092450 LOS ANGELES RIVER AT SEPULVEDA DAM, CA

LOCATION.--Lat 34°09'42", long 118°27'57", in Ex Mission de San Fernando Grant, Los Angeles County, Hydrologic Unit 18070105, on right bank of outlet channel of Sepulveda Dam, 200 ft (61 m) upstream from Sepulveda Boulevard in city of Los Angeles, and 1.8 mi (2.9 km) southwest of Van Nuys.

DRAINAGE AREA.--158 mi² (409 km²).

PERIOD OF RECORD.--January 1929 to February 1938, May 1938 to September 1979 (discontinued). See WSP 1315-B, 1735 for history of records prior to September 1950.

GAGE.--Water-stage recorder. Datum of gage is 652.7 ft (198.94 m) National Geodetic Vertical Datum of 1929. See WSP 1735 for history of changes prior to Aug. 29, 1953.

REMARKS.--Records fair. Flow regulated since December 1941 by Sepulveda flood-control reservoir, capacity, 17,400 acre-ft (21.5 hm³). Some diversion above station. At times, city of Los Angeles discharges imported Owens River water into Los Angeles River from upstream distributing reservoirs. During current year, no imported water was reported. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records of released water from reservoirs were furnished by city of Los Angeles.

AVERAGE DISCHARGE.--49 years (water years 1930-37, 1939-79), 34.4 ft³/s (0.974 m³/s), 24,920 acre-ft/yr (30.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,700 ft³/s (416 m³/s) Mar. 4, 1978, gage height, 12.04 ft (3.670 m); no flow Sept. 19, 20, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 2, 1938, estimated to be 12,000 ft³/s (340 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,200 ft³/s (317 m³/s) Mar. 27, gage height, 9.92 ft (3.024 m); minimum daily, 1.4 ft³/s (0.040 m³/s) Nov. 17 and 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	4.4	16	7.3	156	487	38	16	13	10	9.8	9.3
2	7.6	4.4	8.1	5.5	781	44	35	16	14	10	10	9.2
3	7.3	4.5	5.7	6.3	114	35	30	16	13	10	11	9.8
4	8.2	5.3	6.1	7.7	50	27	27	16	13	11	10	9.9
5	9.9	5.6	6.0	3580	34	23	27	20	13	10	10	11
6	9.1	5.2	5.1	285	36	18	26	19	11	10	11	17
7	7.9	4.9	5.1	34	37	16	27	18	12	11	9.6	8.7
8	8.1	5.7	5.5	19	38	17	25	19	11	11	9.1	8.4
9	7.6	5.0	5.5	101	37	15	25	18	11	12	9.2	8.4
10	6.4	24	6.0	19	39	14	23	18	11	11	9.1	9.8
11	6.3	155	6.0	12	35	14	21	19	14	11	9.0	13
12	8.0	12	6.5	11	28	15	21	23	12	11	9.3	11
13	8.2	165	7.0	9.6	53	124	23	23	13	12	9.5	11
14	7.5	18	7.0	120	439	24	24	24	11	11	9.9	10
15	6.9	1.8	7.5	2570	35	25	24	24	11	11	9.7	12
16	7.7	1.5	7.5	2560	19	18	23	24	11	11	8.7	11
17	6.0	1.4	134	89	17	466	22	24	10	11	9.2	10
18	6.6	1.5	706	93	15	72	21	24	10	12	9.1	11
19	7.3	1.4	117	37	22	95	20	25	11	11	9.1	10
20	8.6	1.6	9.7	30	80	100	19	24	10	11	9.0	9.8
21	7.2	375	8.9	23	879	27	20	23	11	10	9.1	14
22	7.0	848	8.1	21	64	15	20	22	11	11	9.8	14
23	5.5	28	8.2	16	357	13	20	19	11	11	9.8	14
24	5.9	9.3	8.2	15	36	13	18	16	10	11	9.9	13
25	7.2	7.7	7.8	13	36	13	18	15	11	12	11	14
26	6.8	7.2	8.0	11	30	12	18	15	11	10	11	16
27	6.4	7.0	7.7	11	23	2640	17	14	11	11	11	18
28	5.9	8.4	7.5	12	21	1240	16	14	11	11	11	17
29	6.2	6.8	7.2	11	---	114	16	14	11	11	11	17
30	7.5	6.5	7.7	959	---	77	16	13	10	11	16	24
31	4.7	---	6.9	1280	---	57	---	13	---	12	9.7	---
TOTAL	223.2	1732.1	1163.5	11968.4	3511	5870	680	588	343	339	310.6	371.3
MEAN	7.20	57.7	37.5	386	125	189	22.7	19.0	11.4	10.9	10.0	12.4
MAX	9.9	848	706	3580	879	2640	38	25	14	12	16	24
MIN	4.7	1.4	5.1	5.5	15	12	16	13	10	10	8.7	8.4
AC-FT	443	3440	2310	23740	6960	11640	1350	1170	680	672	616	736

CAL YR 1978 TOTAL 57461.04 MEAN 157 MAX 9750 MIN .94 AC-FT 114000
WTR YR 1979 TOTAL 27100.10 MEAN 74.2 MAX 3580 MIN 1.4 AC-FT 53750

11093000 PACOIMA CREEK NEAR SAN FERNANDO, CA

LOCATION.--Lat 34°20'07", long 118°23'50", in SE¼NE¼ sec.24, T.3 N., R.15 W., Los Angeles County, Hydrologic Unit 18070105, on right bank 500 ft (150 m) downstream from Pacoima Dam, 0.3 mi (0.5 km) upstream from mouth of canyon, and 4 mi (6 km) northeast of San Fernando.

DRAINAGE AREA.--28.3 mi² (73.3 km²).

PERIOD OF RECORD.--March to July 1916 (fragmentary), December 1916 to current year.

GAGE.--Water-stage recorder. Flume or weir control since June 1937. Altitude of gage is 1,650 ft (503 m), from topographic map. See WSP 1735 for history of changes prior to Feb. 1, 1935.

REMARKS.--Records poor. Flow regulated by Pacoima flood-control reservoir since February 1929, capacity, 3,841 acre-ft (4.74 hm³). Flow passing over Pacoima Dam spillway enters creek below station. No diversion above station. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records were furnished by Los Angeles County Flood Control District.

AVERAGE DISCHARGE.--62 years (water years 1918-79), 9.92 ft³/s (0.281 m³/s), 7,190 acre-ft/yr (8.87 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,440 ft³/s (69.1 m³/s) Mar. 3, 1938; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 104 ft³/s (2.95 m³/s), Mar. 2; no flow Mar. 27, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	3.9	3.9	.10	50	45	64	48	.09	.01	.01	.01
2	4.0	3.9	3.9	.10	.02	104	62	46	.09	.01	.01	.01
3	4.0	3.9	3.9	.10	32	103	93	42	.08	.01	.01	.01
4	4.0	3.9	3.9	.10	56	102	112	51	.08	.01	.01	.01
5	4.0	3.9	3.9	.10	23	101	87	59	.07	.01	.01	.01
6	4.0	3.9	3.9	.10	.06	100	50	59	.06	.01	.01	.01
7	4.0	3.9	3.9	.10	.05	99	34	56	.05	.01	.01	.01
8	4.0	3.9	3.9	.10	.04	99	32	58	.04	.01	.01	.01
9	4.0	3.9	3.9	.10	.03	84	44	58	.03	.01	.01	.01
10	3.9	3.9	3.9	.10	.02	76	53	58	.03	.01	.01	.01
11	3.9	3.9	3.9	.10	.01	76	53	58	.02	.01	.01	.01
12	3.9	3.9	3.9	.10	.01	76	19	58	.02	.01	.01	.01
13	3.9	3.9	3.9	.10	.01	76	31	57	.02	.01	.01	.01
14	3.9	3.9	3.9	.10	.01	76	79	57	.02	.01	.01	.01
15	3.9	3.9	3.9	.10	.01	68	78	65	.02	.01	.01	.01
16	3.9	3.9	3.9	.10	.01	55	69	78	.02	.01	.01	.01
17	3.9	3.9	3.9	.10	.01	55	56	73	.02	.01	.01	.01
18	3.9	3.9	3.9	.10	.01	55	56	37	.02	.01	.01	.01
19	3.9	3.9	47	.10	.01	55	56	.10	.02	.01	.01	.01
20	3.9	3.9	81	.10	.01	55	56	.10	.02	.01	.01	.01
21	3.9	3.9	41	.10	.01	54	55	.10	.02	.01	.01	.01
22	3.9	3.9	.10	.10	.01	53	54	.10	.02	.01	.01	.01
23	3.9	3.9	.10	.10	.01	53	53	.10	.02	.01	.01	.01
24	3.9	3.9	.10	.10	.01	53	48	.10	.02	.01	.01	.01
25	3.9	3.9	.10	.10	.01	53	48	.10	.02	.01	.01	.01
26	3.9	3.9	.10	.10	.01	36	48	.10	.02	.01	.01	.01
27	3.9	3.9	.10	.10	.01	0	48	.10	.02	.01	.01	.01
28	3.9	3.9	.10	.10	.01	0	48	.10	.02	.01	.01	.01
29	3.9	3.9	.10	49	---	8.9	48	.10	.02	.01	.01	.01
30	3.9	3.9	.10	80	---	50	48	.10	.02	.01	.01	.01
31	3.9	---	.10	80	---	35	---	.10	---	.01	.01	---
TOTAL	121.8	117.0	240.20	211.80	161.40	1955.9	1682	1023.30	1.02	.31	.31	.30
MEAN	3.93	3.90	7.75	6.83	5.76	63.1	56.1	33.0	.034	.010	.010	.010
MAX	4.0	3.9	81	80	56	104	112	78	.09	.01	.01	.01
MIN	3.9	3.9	.10	.10	.01	0	19	.10	.02	.01	.01	.01
AC-FT	242	232	476	420	320	3880	3340	2030	2.0	.6	.6	.6

CAL YR 1978 TOTAL 20260.10 MEAN 55.5 MAX 940 MIN 0 AC-FT 40190
WTR YR 1979 TOTAL 5515.34 MEAN 15.1 MAX 112 MIN 0 AC-FT 10940

11095500 BIG TUJUNGA CREEK NEAR SUNLAND, CA

LOCATION.--Lat 34°16'02", long 118°16'04", in SW¼NW¼SW¼ sec.32, T.3 N., R.13 W., Los Angeles County, Hydrologic Unit 18070105, on left bank 1,000 ft (300 m) upstream from Gold Canyon, 2 mi (3 km) upstream from mouth of canyon, and 4 mi (6 km) northeast of Sunland.

DRAINAGE AREA.--106 mi² (275 km²).

PERIOD OF RECORD.--October 1916 to current year. Prior to October 1974, published as Tujunga Creek near Sunland.

GAGE.--Water-stage recorder. Datum of gage is 1,571.80 ft (479.085 m) National Geodetic Vertical Datum of 1929 (levels by Los Angeles County Flood Control District). Prior to Oct. 1, 1932, at site 1,000 ft (300 m) upstream at different datum.

REMARKS.--Records poor. Flow regulated since July 1931 by Big Tujunga flood-control reservoir, capacity, 3,819 acre-ft (4.71 hm³). Several small diversions above station for irrigation. See schematic diagram of San Gabriel and Los Angeles River basins. Record for 1978 and 1979 water years not published due to lack of data.

COOPERATION.--Records were furnished by Los Angeles County Flood Control District.

AVERAGE DISCHARGE.--60 years (water years 1918-77), 28.0 ft³/s (0.793 m³/s), 20,290 acre-ft/yr (25.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50,000 ft³/s (1,420 m³/s), estimated, Mar. 2, 1938; minimum, 0.10 ft³/s (0.003 m³/s) at times in some years.

NOTE.--Record for current year will not be published due to lack of data.

11097000 BIG TUJUNGA CREEK BELOW HANSEN DAM, CA

LOCATION.--Lat 34°15'13", long 118°23'17", in Ex Mission San Fernando Grant, Los Angeles County, Hydrologic Unit 18070105, in city of Los Angeles, on left bank of outlet channel of Hansen Dam, 0.1 mi (0.2 km) upstream from Glen Oaks Boulevard, and 3 mi (5 km) southeast of San Fernando.

DRAINAGE AREA.--153 mi² (396 km²).

PERIOD OF RECORD.--May 1932 to February 1938, August 1940 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.--Water-stage recorder. Datum of gage is 983.32 ft (287.524 m) Corps of Engineers datum. See WSP 1735 for history of changes prior to Oct. 1, 1953.

REMARKS.--Records good. Flow regulated since July 1931 by Big Tujunga flood-control reservoir, capacity, 4,240 acre-ft (5.23 hm³) and since September 1940 by Hansen flood-control reservoir, capacity, 29,700 acre-ft (36.6 hm³). Several small diversions for domestic use and irrigation. Water reported herein is that which passed Hansen Dam. Los Angeles County Flood Control District diverts 0.3 mi (0.5 km) upstream from gage to spreading grounds. See schematic diagram of San Gabriel and Los Angeles River basins. Figures of combined river and diversion which were omitted in 1978 report are given herein.

COOPERATION.--Records of diversion were furnished by Los Angeles County Flood Control District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft³/s (340 m³/s) Feb. 10, 1978, gage height, 7.63 ft (2.326 m), from rating curve extended above 5,000 ft³/s (142 m³/s) on basis of gate openings at dam; no flow for all or parts of each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 54,000 ft³/s (1,530 m³/s), estimated, Mar. 2, 1938.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,040 ft³/s (29.5 m³/s) May 24, gage height, 2.36 ft (0.719 m), from rating curve extended above 5,000 ft³/s (142 m³/s) on basis of gate openings at dam; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	14	20	0	0	.14	122	88	5.8	25	24	17
2	25	13	19	0	29	.14	52	86	13	25	25	17
3	25	12	19	45	9.9	.14	85	86	15	27	25	17
4	39	15	19	17	1.3	.14	12	85	12	31	25	17
5	28	15	22	.14	.21	.14	.04	81	1.8	31	25	15
6	28	13	23	0	.03	.14	0	81	3.2	28	25	15
7	25	11	24	0	.12	.14	0	81	1.9	28	22	15
8	29	11	22	0	.14	.14	0	79	81	28	15	15
9	28	10	25	8.6	18	.14	0	76	135	25	16	12
10	28	7.6	25	8.6	31	.14	0	73	122	19	17	12
11	22	9.3	25	9.3	7.8	0	.21	62	19	19	17	11
12	26	11	24	2.9	1.8	0	.09	65	7.9	22	17	11
13	25	15	18	1.9	1.3	.14	.03	62	5.0	25	17	10
14	26	16	15	1.1	5.1	.14	0	25	7.2	25	17	8.6
15	25	12	15	1.1	13	.14	0	27	11	25	14	8.6
16	25	8.7	22	25	.09	2.9	.01	26	13	25	17	8.6
17	25	6.1	31	0	0	1.9	.09	23	17	28	17	8.6
18	23	4.9	19	0	0	.14	3.9	30	19	28	17	6.9
19	23	3.5	6.9	0	0	1.1	.07	31	18	28	17	6.9
20	24	2.1	2.7	0	0	0	.50	21	14	28	17	5.3
21	30	3.7	.17	0	18	0	.47	25	12	28	17	5.3
22	34	4.1	.14	0	.60	0	.49	22	12	31	17	5.3
23	40	13	.07	0	.61	0	58	53	12	31	17	5.3
24	36	17	0	.20	.50	.14	129	293	17	31	15	20
25	33	16	0	0	.50	.50	115	3.6	17	31	17	25
26	27	15	0	0	.14	.52	106	0	17	31	17	22
27	25	19	5.3	0	.14	229	102	.60	17	28	17	22
28	25	19	0	0	.14	596	98	2.2	19	26	17	17
29	25	19	.50	0	---	597	91	2.8	22	25	17	17
30	26	19	0	.04	---	465	89	2.6	22	25	17	17
31	25	---	0	.20	---	231	---	2.1	---	25	17	---
TOTAL	842	363.0	403.78	117.14	132.12	2125.02	1003.70	1594.90	688.8	832	571	393.6
MEAN	27.2	12.1	13.0	3.78	4.72	68.5	33.5	51.4	23.0	26.8	18.4	13.1
MAX	40	19	31	45	31	597	129	293	135	31	25	25
MIN	20	2.1	0	0	0	0	0	0	1.8	19	14	5.3
AC-FT	1670	720	801	232	262	4210	1990	3160	1370	1650	1130	780
a	1670	720	1640	4860	5030	9920	8020	4980	2270	1650	1130	780
b	0	0	22	6740	32100	60290	19190	8040	6710	2144	1081	3027

CAL YR 1978 TOTAL 57667.62 MEAN 158 MAX 7760 MIN 0 AC-FT 114400 AC-FT a 143353 CAL YR 1977 3182
WTR YR 1979 TOTAL 9066.86 MEAN 24.8 MAX 597 MIN 0 AC-FT 17980 AC-FT a 42670 WTR YR 1978 139344

a Combined discharge, in acre-feet, of creek and diversion.
b Combined discharge, in acre-feet, of creek and diversion for water year 1978.

11097500 LOS ANGELES RIVER AT LOS ANGELES, CA

LOCATION.--Lat 34°04'52", long 118°13'36", landline location not available, Los Angeles County, Hydrologic Unit 18070105, on right bank near Figueroa Street, Los Angeles, and 800 ft (240 m) upstream from Arroyo Seco.

DRAINAGE AREA.--514 mi² (1,331 km²).

PERIOD OF RECORD.--October 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 292.58 ft (89.178 m) National Geodetic Vertical Datum of 1929 (levels by Los Angeles County Flood Control District). See WSP 1315-B for history of changes prior to Dec. 8, 1939.

REMARKS.--Records fair, except flows above 1,000 ft³/s (28.3 m³/s) which are poor. Flow regulated since September 1940 by Hansen flood-control reservoir and since December 1941 by Sepulveda flood-control reservoir, combined capacity, 49,400 acre-ft (60.9 hm³) and several small flood-control reservoirs. At times city of Los Angeles discharges imported Owens River water into Los Angeles River from upstream distributing reservoirs. Excess treated sewage effluent from Los Angeles Bureau of Sanitation is released to channel about 8 mi (13 km) upstream. Many diversions above station for domestic use and irrigation. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records were furnished by Los Angeles County Flood Control District.

AVERAGE DISCHARGE.--50 years, 85.1 ft³/s (2.410 m³/s), 61,650 acre-ft/yr (76.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 67,000 ft³/s (1,900 m³/s) Mar. 2, 1938; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,800 ft³/s (731 m³/s) Mar. 27, gage height, 8.68 ft (2.646 m); minimum daily, 15 ft³/s (0.42 m³/s) Jan. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	36	58	52	654	1220	120	129	58	55	52	46
2	65	46	61	54	1610	97	93	129	56	56	55	45
3	61	46	38	85	342	48	79	126	61	58	50	49
4	59	47	43	176	92	35	70	126	62	58	43	53
5	56	55	45	6240	57	34	70	123	37	59	41	53
6	59	53	53	1050	41	31	58	123	26	60	45	55
7	59	49	46	90	60	38	52	120	38	58	46	49
8	55	57	35	44	62	37	50	120	77	53	46	49
9	59	60	27	299	52	36	52	120	100	53	45	47
10	62	163	37	64	65	32	53	117	114	53	47	53
11	64	533	41	24	60	38	55	114	72	52	47	45
12	64	96	45	17	57	41	49	114	26	52	49	55
13	64	256	31	15	55	275	40	111	25	58	50	56
14	58	123	28	301	946	85	35	108	30	56	47	53
15	52	53	43	4280	124	53	36	95	47	50	45	55
16	53	50	52	5410	30	68	34	85	49	41	52	50
17	46	35	84	225	27	1570	39	79	64	34	55	52
18	39	27	1460	246	26	335	39	85	56	28	56	55
19	42	33	712	129	31	512	38	100	45	45	55	55
20	68	32	74	114	125	294	31	108	46	53	58	56
21	58	807	34	164	2600	72	33	100	53	56	56	52
22	46	1330	33	175	175	60	31	75	74	55	56	58
23	41	213	24	107	857	34	38	76	74	59	53	47
24	19	93	22	75	75	24	163	268	62	58	53	53
25	33	84	29	80	53	25	144	77	59	56	49	50
26	37	84	31	65	52	28	138	58	65	61	47	59
27	37	66	34	64	39	6030	135	55	64	59	47	59
28	45	55	38	97	42	3030	135	58	58	56	45	61
29	43	54	32	72	---	908	132	58	58	53	47	58
30	40	39	41	1820	---	500	132	56	55	52	47	65
31	54	---	38	2800	---	257	---	59	---	52	47	---
TOTAL	1605	4675	3369	24434	8409	15847	2174	3174	1711	1649	1531	1593
MEAN	51.8	156	109	788	300	511	72.5	102	57.0	53.2	49.4	53.1
MAX	68	1330	1460	6240	2600	6030	163	268	114	61	58	65
MIN	19	27	22	15	26	24	31	55	25	28	41	45
AC-FT	3180	9270	6680	48460	16680	31430	4310	6300	3390	3270	3040	3160

CAL YR 1978 TOTAL 183138 MEAN 502 MAX 22700 MIN 11 AC-FT 363300
WTR YR 1979 TOTAL 70171 MEAN 192 MAX 6240 MIN 15 AC-FT 139200

11098000 ARROYO SECO NEAR PASADENA, CA

LOCATION.--Lat 34°13'20", long 118°10'36", in NW¼NW¼NE¼ sec.31, T.2 N., R.12 W., Los Angeles County, Hydrologic Unit 18070105, on right bank, 0.7 mi (1.1 km) east of Angeles Crest Highway, 1.5 mi (2.4 km) upstream from Millard Canyon, and 5.5 mi (8.8 km) northwest of Pasadena.

DRAINAGE AREA.--16.0 mi² (41.4 km²).

PERIOD OF RECORD.--December 1910 to current year.

GAGE.--Water-stage recorder. Broad-crested weir since November 1938. Datum of gage is 1,397.88 ft (426.074 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1916, nonrecording gage at different datum. Oct. 1, 1916, to Oct. 19, 1945, water-stage recorder at datum 4.00 ft (1.219 m) lower.

REMARKS.--Records fair. Minor regulation by debris dam 1.5 mi (2.4 km) upstream. No diversion above station. See schematic diagram of San Gabriel and Los Angeles River basins.

AVERAGE DISCHARGE.--65 years (water years 1914-15, 1917-79), 9.55 ft³/s (0.270 m³/s), 6,920 acre-ft/yr (8.53 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,620 ft³/s (244 m³/s) Mar. 2, 1938, gage height, 9.42 ft (2.871 m), present datum, on basis of slope-area measurement of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 193 ft³/s (5.47 m³/s) Feb. 21, gage height, 2.82 ft (0.860 m), no peak above base of 200 ft³/s (5.66 m³/s); minimum, 0.38 ft³/s (0.011 m³/s) Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	4.3	4.2	4.9	44	28	60	11	5.6	2.8	1.3	.84
2	3.0	4.2	4.2	4.7	31	18	52	11	5.6	3.0	1.3	.78
3	3.0	4.0	3.9	4.5	22	15	44	10	5.2	3.2	1.5	.72
4	2.9	3.9	3.7	4.5	17	14	37	9.8	5.2	3.3	1.5	.78
5	2.9	3.9	3.7	57	15	13	32	9.4	5.0	3.0	1.5	.77
6	2.9	4.0	3.9	56	15	12	24	9.5	5.0	2.9	1.3	.76
7	2.8	4.0	4.2	17	16	11	27	9.5	5.0	2.8	1.3	.75
8	2.8	4.0	4.2	12	15	11	24	9.1	5.0	2.6	1.3	.79
9	2.8	4.1	4.4	11	15	11	23	8.6	5.0	2.5	1.3	.72
10	2.7	5.1	4.2	9.1	14	10	22	8.5	4.6	2.4	1.3	.71
11	2.4	7.1	4.2	8.1	13	9.7	20	8.0	4.6	2.4	1.4	.69
12	2.4	7.1	4.2	7.6	12	9.5	19	7.6	4.6	2.5	1.6	.79
13	2.5	5.6	4.2	6.9	12	11	18	7.1	4.5	2.4	1.8	.77
14	2.4	5.5	4.2	7.8	21	10	17	6.6	4.4	2.4	1.9	.78
15	2.4	5.1	4.2	52	16	10	16	6.8	4.4	2.3	1.7	.87
16	2.5	4.8	4.8	119	13	10	16	7.2	4.3	2.1	1.6	.92
17	2.7	4.7	6.2	41	12	30	16	7.2	4.1	2.0	1.5	.94
18	2.7	4.5	46	24	11	16	15	7.2	4.0	2.1	1.5	.92
19	2.6	4.4	29	18	10	29	14	7.1	4.0	2.1	1.5	1.0
20	2.9	4.5	11	14	12	23	14	7.0	3.9	2.3	1.6	1.0
21	3.0	5.4	7.9	13	79	20	13	6.8	3.7	2.4	1.6	1.0
22	2.9	6.2	7.0	11	31	18	12	6.6	3.7	2.4	1.4	1.0
23	2.4	5.2	6.6	10	31	16	12	6.4	3.7	2.3	.52	1.1
24	2.4	4.5	6.2	9.7	24	14	12	6.2	3.6	2.2	.60	1.3
25	2.6	4.4	5.9	9.4	20	14	11	6.8	3.6	2.2	.47	2.3
26	2.7	4.4	5.6	8.3	18	14	11	6.7	3.3	2.1	.38	4.6
27	2.6	4.2	5.4	7.6	16	15	11	6.5	3.1	2.0	.41	4.8
28	2.5	4.0	5.3	7.3	14	15	11	6.4	2.9	1.9	.60	4.4
29	2.9	4.0	5.2	6.9	---	15	11	6.3	2.8	1.4	.70	3.1
30	3.9	4.0	5.1	9.1	---	15	10	6.1	2.7	1.3	.75	2.2
31	4.4	---	4.9	38	---	15	---	5.8	---	1.3	.76	---
TOTAL	86.8	141.1	222.9	609.4	569	472.2	629	239.0	127.1	72.6	37.89	42.10
MEAN	2.80	4.70	7.19	19.7	20.3	15.2	21.0	7.71	4.24	2.34	1.22	1.40
MAX	4.4	7.1	46	119	79	30	60	11	5.6	3.3	1.9	4.8
MIN	2.4	3.9	3.7	4.5	10	9.5	10	5.8	2.7	1.3	.38	.69
AC-FT	172	280	442	1210	1130	937	1250	474	252	144	75	84

CAL YR 1978 TOTAL 13392.70 MEAN 36.7 MAX 1400 MIN 2.4 AC-FT 26560
WTR YR 1979 TOTAL 3249.09 MEAN 8.90 MAX 119 MIN .38 AC-FT 6440

11101250 RIO HONDO ABOVE WHITTIER NARROWS DAM, CA

LOCATION.--Lat 34°03'32", long 118°04'13", in Potrero Grande Grant, Los Angeles County, Hydrologic Unit 18070105, on right bank 0.3 mi (0.5 km) downstream from Garvey Avenue, 0.4 mi (0.6 km) downstream from Rubio Wash, and 2.2 mi (3.5 km) west of El Monte.

DRAINAGE AREA.--91.2 mi² (236.2 km²).

PERIOD OF RECORD.--February 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 217.8 ft (66.39 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow regulated by Big Santa Anita, Sawpit, and Eaton flood-control reservoirs, combined capacity, 1,700 acre-ft (2.10 hm³) and Sierra Madre, Las Flores, and Rubio debris basins. Many diversions above station for domestic use and irrigation. 12,110 acre-ft (14.9 hm³) were diverted by Los Angeles County Flood Control District from San Gabriel River below Santa Fe Dam to Rio Hondo during current year. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records of diversion were furnished by the Los Angeles County Flood Control District.

AVERAGE DISCHARGE.--23 years, 34.7 ft³/s (0.983 m³/s), 25,140 acre-ft/yr (31.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,700 ft³/s (501 m³/s) Jan. 25, 1969, gage height, 7.23 ft (2.204 m); no flow in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,180 ft³/s (203 m³/s) Mar. 27 (0900 hrs), gage height, 4.62 ft (1.408 m); no other peak above base of 3,000 ft³/s (85.0 m³/s); minimum daily 0.61 ft³/s (0.017 m³/s) Nov. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	.61	7.4	.86	1000	420	5.3	62	137	15	1.6	3.3
2	1.9	.70	2.3	1.5	610	600	5.6	146	140	8.9	1.7	3.0
3	1.5	1.2	1.4	1.1	6.2	14	5.6	143	141	5.9	1.9	2.1
4	1.5	.69	1.4	1.6	5.0	9.0	5.6	140	138	3.5	1.1	1.2
5	2.4	.74	.96	6.9	4.5	7.4	6.3	137	136	2.5	1.0	1.3
6	2.3	.98	.72	4.1	4.3	7.9	5.6	137	136	1.8	1.6	1.4
7	1.6	.70	.84	551	4.1	6.9	5.6	136	137	1.2	1.4	1.7
8	1.8	.66	1.1	57	4.0	7.4	5.6	133	133	.98	1.5	1.3
9	1.8	.64	1.1	33	3.6	7.6	5.8	130	104	1.0	1.6	1.3
10	2.6	90	1.4	28	3.4	7.4	4.1	130	76	1.4	1.4	2.0
11	2.9	202	1.4	22	3.3	17	4.6	130	64	1.3	1.9	2.8
12	3.0	4.8	1.7	17	3.1	23	3.6	129	44	1.9	1.4	2.7
13	2.0	33	1.6	13	62	14	3.8	129	7.2	3.2	1.4	3.4
14	3.2	8.6	1.6	21	13	50	3.8	130	7.2	1.0	1.2	4.8
15	7.2	1.1	1.6	8.1	19	11	3.8	130	7.5	.77	1.5	4.8
16	1.5	1.3	1.6	338	15	11	3.6	130	6.2	1.4	1.2	2.8
17	1.4	1.3	500	45	10	266	3.6	130	5.9	1.7	1.5	3.5
18	1.4	1.1	1300	9.2	211	135	3.6	134	6.0	1.5	1.7	4.0
19	1.6	1.1	210	8.0	10	305	3.8	136	41	1.4	1.3	3.4
20	6.3	1.7	30	5.6	7.6	127	3.6	136	76	1.8	1.1	3.5
21	.99	273	2.3	3.5	7.2	6.9	3.6	136	60	1.1	1.1	3.6
22	.93	24	2.2	3.4	7.2	11	2.9	137	51	.93	1.1	1.4
23	1.9	2.1	2.1	3.4	7.2	5.1	3.4	136	36	1.5	.98	1.3
24	2.0	1.4	3.2	3.4	7.0	4.8	2.9	138	27	2.9	1.6	3.7
25	1.5	8.0	1.3	3.4	6.8	4.8	4.6	138	22	1.8	1.5	2.0
26	1.5	1.1	1.2	3.4	7.0	5.1	4.6	140	27	1.7	1.3	2.2
27	1.5	1.3	1.1	3.4	9.0	882	2.7	137	32	1.3	1.5	2.2
28	1.5	1.4	1.3	3.5	20	167	2.7	142	35	.91	1.7	2.5
29	1.3	1.6	3.3	4.0	---	97	2.3	136	34	.98	1.7	2.2
30	5.4	1.6	2.9	150	---	5.8	2.9	136	23	1.1	1.6	1.6
31	1.1	---	1.1	1200	---	5.8	---	136	---	1.5	2.1	---
TOTAL	69.12	658.46	2040.12	2553.30	2070.5	3243.9	125.5	4120	1890.0	73.87	45.18	77.0
MEAN	2.23	21.9	67.4	82.4	73.9	105	4.18	133	63.0	2.38	1.46	2.57
MAX	7.2	273	1300	1200	1000	882	6.3	146	141	15	2.1	4.8
MIN	.93	.61	.72	.86	3.1	4.8	2.3	62	5.9	.77	.98	1.2
AC-FT	137	1310	4150	5060	4110	6430	249	8170	3750	147	90	153

CAL YR 1978 TOTAL 44928.73 MEAN 123 MAX 3780 MIN .61 AC-FT 89120
WTR YR 1979 TOTAL 17017.01 MEAN 46.6 MAX 1300 MIN .61 AC-FT 33750

11101380 ALHAMBRA WASH AT KLINGERMAN STREET NEAR MONTEBELLO, CA

LOCATION.--Lat 34°03'22", long 118°05'12", in Potrero Grande Grant, Los Angeles County, Hydrologic Unit 18070105, on left bank 250 ft (75 m) north of Klingerman Street, and 0.1 mi (0.2 km) south of Garvey Avenue in South San Gabriel.

DRAINAGE AREA.--15.2 mi² (39.4 km²), by Los Angeles County Flood Control District.

PERIOD OF RECORD.--October 1975 to current year. September 1936 to September 1975 in the files of Los Angeles County Flood Control District.

GAGE.--Water-stage recorder. Altitude of gage is 240 ft (73 m), from topographic map.

REMARKS.--Records poor. No regulation or diversion above station.

COOPERATION.--Records were furnished by Los Angeles County Flood Control District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,950 ft³/s (169 m³/s) Mar. 1, 1978, gage height, 6.07 ft (1.850 m); minimum daily, 0.30 ft³/s (0.008 m³/s) several days in 1976 and 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 2, 1938, reached a discharge of 5,010 ft³/s (142 m³/s), gage height unknown, from information by Los Angeles County Flood Control District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,484 ft³/s (127 m³/s) Mar. 27, gage height, 5.15 ft (1.570 m); minimum daily, 0.33 ft³/s (0.009 m³/s) several days November to April.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.88	.40	1.8	.40	43	79	.40	.40	.64	.64	.88	.64
2	.64	.40	.40	.33	79	.40	.40	.64	.40	.64	.88	.64
3	.88	.40	.40	.33	1.1	.33	.40	.64	.40	.64	.88	.64
4	.88	.40	.40	.40	.40	.33	.40	.40	.64	.64	.64	.64
5	.64	.40	.40	306	.40	.33	.40	.40	.64	.64	.64	.64
6	.64	.40	.40	29	.40	.64	.40	.40	.64	.64	.64	.64
7	.64	.40	.88	.40	.64	.40	.40	.40	.64	.64	.64	.64
8	.64	.40	.33	.40	.40	.40	.33	.40	.40	.64	.64	.64
9	.64	.40	.40	12	.40	.33	.40	.40	.40	.64	.88	.64
10	.64	25	.33	.40	.40	.33	.33	.40	.40	.64	.88	.64
11	.64	70	.40	.40	.33	.33	.40	.40	.64	.88	.64	.88
12	.64	2.3	.40	.40	.33	.40	.40	.40	.64	.88	.64	.88
13	.64	14	.40	.33	3.4	27	.33	.40	.64	.64	.88	1.1
14	.88	1.8	.40	41	27	.88	.40	.64	.88	.64	.88	.88
15	.64	.40	.40	204	.40	.40	.40	.64	.64	.64	1.1	.88
16	.64	.40	2.6	79	.33	8.8	.40	.64	.64	.64	.64	.88
17	.88	.40	88	2.6	.33	121	.40	.64	.40	.64	.88	.88
18	.64	.33	118	25	.33	46	.40	.88	.40	.64	.64	.88
19	.64	.40	27	.40	.64	82	.64	.64	.64	.64	.64	.88
20	1.1	.40	.40	.40	34	27	.64	.64	.64	.64	.64	.88
21	.88	108	.40	.33	187	.64	.64	.64	.64	.64	.88	.88
22	.64	13	.40	.33	.88	6.4	.40	.64	.64	.64	.64	1.1
23	.64	.64	.40	.88	41	.40	.40	.64	.64	.64	.64	.88
24	.64	.40	.40	.40	.40	.64	.40	.64	.64	.64	.64	.88
25	.64	.40	.40	.33	.33	.88	.64	.64	.64	.64	.64	.88
26	.64	.33	.40	.64	.40	.88	.40	.64	.64	.64	.64	.88
27	.64	.33	.40	.40	.33	836	.40	.40	.64	.64	.64	.88
28	.64	.40	.40	.33	.33	276	.40	.40	.64	.64	.64	.64
29	.64	.40	.40	.33	---	111	.40	.64	.64	.64	.64	.64
30	.64	.40	.40	271	---	.64	.40	.64	.64	.64	.64	.64
31	.88	---	.40	191	---	.40	---	.64	---	.64	.64	---
TOTAL	21.98	243.33	248.14	1169.16	423.90	1630.18	12.75	16.96	17.76	20.32	22.46	23.72
MEAN	.71	8.11	8.00	37.7	15.1	52.6	.43	.55	.59	.66	.72	.79
MAX	1.1	108	118	306	187	836	.64	.88	.88	.88	1.1	1.1
MIN	.64	.33	.33	.33	.33	.33	.33	.40	.40	.64	.64	.64
AC-FT	44	483	492	2320	841	3230	25	34	35	40	45	47

CAL YR 1978 TOTAL 5832.04 MEAN 16.0 MAX 695 MIN .33 AC-FT 11570
WTR YR 1979 TOTAL 3850.66 MEAN 10.5 MAX 836 MIN .33 AC-FT 7640

11102300 RIO HONDO BELOW WHITTIER NARROWS DAM, CA

LOCATION.--Lat 34°01'00", long 118°05'15", in Paso de Bartolo Grant, Los Angeles County, Hydrologic Unit 18070105, on right levee 0.2 mi (0.3 km) upstream from Beverly Boulevard, 0.4 mi (0.6 km) downstream from axis of Whittier Narrows Dam, and 1.0 mi (1.6 km) northeast of Montebello.

DRAINAGE AREA.--124 mi^2 (321 km^2).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 175 ft (53 m), from topographic map.

REMARKS.--Records good above 100 ft^3/s (2.83 m^3/s) and poor below. Flow regulated by Whittier Narrows flood-control reservoir, capacity, 36,160 acre-ft (44.6 hm^3). There are several small flood-control reservoirs, combined capacities, 1,700 acre-ft (2.10 hm^3) and several small debris basins above Whittier Narrows Dam. Many diversions for domestic use and irrigation. At times flow is diverted from San Gabriel River to Rio Hondo from sites below Santa Fe Dam and above Whittier Narrows Dam. See schematic diagram of San Gabriel and Los Angeles River basins.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,800 ft^3/s (1,100 m^3/s) Jan. 25, 1969, gage height, 13.82 ft (4.212 m), from rating curve extended above 15,000 ft^3/s (425 m^3/s) on basis of gate openings at dam at gage heights 12.32 ft (3.755 m) and 13.82 ft (4.212 m); no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23,610 ft^3/s (669 m^3/s) Mar. 27, gage height, 10.48 ft (3.194 m); no flow Aug. 22-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142	47	157	136	800	521	179	60	184	.11	192	90
2	86	92	161	91	500	321	129	174	171	.10	188	88
3	93	190	166	43	265	102	54	163	161	7.0	182	92
4	15	197	170	112	250	97	96	141	148	22	178	106
5	133	196	169	640	158	58	97	138	132	22	173	118
6	146	200	158	1100	56	36	98	142	135	46	170	138
7	143	206	158	568	26	42	102	135	141	106	155	151
8	147	68	168	197	18	58	106	145	141	103	151	132
9	151	209	167	114	21	58	107	154	104	94	143	102
10	154	280	170	45	26	50	107	145	79	12	135	91
11	154	311	178	40	31	45	85	142	65	16	138	92
12	157	70	183	66	32	79	18	125	39	100	104	89
13	165	117	185	85	54	287	20	122	.36	201	147	89
14	161	77	188	206	201	122	24	122	1.4	211	147	87
15	88	121	199	926	57	62	26	123	1.7	167	150	82
16	1.1	168	197	668	52	73	30	124	2.1	134	151	85
17	1.1	170	603	334	52	727	37	117	3.5	123	154	47
18	21	170	820	271	46	499	54	130	2.1	119	155	48
19	39	173	603	152	58	1190	83	135	8.5	103	153	48
20	29	167	442	70	109	388	125	122	45	106	143	47
21	153	430	257	74	1420	272	141	115	40	116	47	76
22	154	491	35	60	524	221	137	117	55	124	0	66
23	159	42	29	78	291	108	108	137	57	150	0	67
24	71	33	26	54	168	56	43	149	36	196	0	69
25	60	147	26	53	46	62	22	165	84	192	0	66
26	55	131	26	49	58	56	10	166	94	168	0	75
27	123	132	26	49	59	4500	13	206	89	136	30	83
28	183	144	41	49	89	1160	12	207	.47	118	58	95
29	186	146	37	49	---	330	10	192	.01	133	50	113
30	194	149	109	900	---	272	17	193	.01	153	58	109
31	179	---	132	5400	---	207	---	204	---	197	92	---
TOTAL	3543.2	5074	5978	12679	5467	12043	2090	4534	2025.15	3375.21	3444	2625
MEAN	114	169	193	409	195	388	69.7	146	67.5	109	111	87.5
MAX	194	491	820	5400	1420	4500	179	208	184	211	192	151
MIN	1.1	33	26	40	18	36	10	60	.01	.10	0	40
AC-FT	7030	10060	11860	25150	10840	23890	4150	8990	4020	6690	6830	5210

CAL YR 1978 TOTAL 140152.90 MEAN 384 MAX 13800 MIN 1.1 AC-FT 278000
WTR YR 1979 TOTAL 62877.56 MEAN 172 MAX 5400 MIN 0 AC-FT 124700

11102500 RIO HONDO NEAR DOWNEY, CA

LOCATION.--Lat 33°56'48", long 118°09'43", in San Antonio Grant, Los Angeles County, Hydrologic Unit 18070105, on left bank 700 ft (210 m) upstream from Stewart and Gray Road bridge, 1.0 mi (1.6 km) upstream from mouth, and 1.5 mi (2.4 km) west of Downey.

DRAINAGE AREA.--143 mi² (370 km²), excludes area above Santa Fe Dam.

PERIOD OF RECORD.--March 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 91.4 ft (27.86 m) National Geodetic Vertical Datum of 1929 (levels by Los Angeles County Flood Control District). Prior to Oct. 31, 1951, at site 700 ft (210 m) downstream at datum 1.5 ft (0.46 m) lower.

REMARKS.--Records poor. Flow regulated since January 1956 by Whittier Narrows flood-control reservoir, capacity, 36,160 acre-ft (44.6 hm³). There are several small flood-control reservoirs, combined capacity, 1,700 acre-ft (2.10 hm³) and several debris basins above Whittier Narrows Dam. Many diversions above station for domestic use and irrigation. At times flow is diverted from San Gabriel River below Santa Fe Dam and above Whittier Narrows Dam to Rio Hondo above station. Since 1937 much of the flow in Rio Hondo has been diverted to percolation basin from a site 5.5 mi (8.8 km) upstream. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records were furnished by Los Angeles County Flood Control District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,900 ft³/s (1,330 m³/s) Jan. 25, 1969, gage height, 15.15 ft (4.618 m); no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,600 ft³/s (725 m³/s) Mar. 27, gage height, 10.83 ft (3.301 m); minimum daily, 0.45 ft³/s (0.013 m³/s) Mar. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	3.9	2.6	1.6	236	67	34	1.2	1.2	1.0	1.4	1.8
2	1.8	3.9	4.5	1.2	370	2.0	6.3	1.2	1.0	.84	1.6	1.8
3	1.6	7.0	3.9	5.3	82	1.6	1.6	1.6	1.2	1.0	1.6	1.4
4	2.5	2.0	3.2	1.4	5.1	1.6	1.4	1.2	1.2	2.0	1.6	1.6
5	2.9	1.8	3.2	296	4.5	.84	1.2	1.2	1.2	1.8	1.8	1.8
6	2.6	1.8	2.6	430	3.9	1.0	3.2	1.2	1.4	1.4	1.8	1.8
7	2.0	1.8	2.0	2.6	3.2	.45	1.8	1.0	1.2	1.8	1.4	1.8
8	2.0	1.8	2.0	3.2	2.6	1.4	1.6	1.2	.84	1.8	1.6	1.8
9	1.8	1.6	1.8	21	2.0	1.6	1.6	1.2	1.0	1.6	1.6	1.8
10	2.0	14	1.6	7.0	2.0	1.4	1.0	1.2	1.0	1.8	1.6	2.0
11	3.2	122	1.6	6.3	1.8	1.6	1.2	1.0	1.0	1.8	1.8	1.4
12	2.6	14	1.6	4.5	1.6	1.6	1.4	1.2	1.2	1.6	2.0	1.6
13	2.0	36	1.4	2.6	3.6	49	1.4	1.0	1.4	1.8	1.2	1.6
14	2.0	5.1	1.4	26	47	1.8	1.2	1.4	1.2	1.2	1.6	1.8
15	1.8	4.5	1.2	388	5.1	1.2	1.2	1.6	1.0	1.4	1.6	1.8
16	1.8	3.9	2.0	179	4.5	1.2	1.0	1.6	1.0	1.8	1.8	2.0
17	1.6	3.2	161	58	3.9	118	1.0	1.4	.84	1.6	2.0	1.6
18	1.6	3.2	196	60	3.9	120	1.2	1.4	.64	1.2	2.0	1.6
19	1.4	2.6	206	20	3.2	761	1.4	1.6	1.0	1.6	1.8	2.6
20	2.6	2.6	120	7.6	11	63	1.6	1.8	1.0	1.2	1.6	1.8
21	2.6	168	10	5.1	892	11	1.2	1.2	1.0	1.4	1.2	2.0
22	2.0	42	4.5	5.1	21	5.7	1.2	1.0	1.0	1.8	2.0	1.8
23	2.0	5.1	3.9	19	88	3.2	1.0	1.2	1.0	1.8	2.6	1.8
24	1.8	4.5	3.9	11	7.0	1.8	1.0	1.2	1.0	1.6	2.0	1.6
25	2.0	4.5	3.2	8.2	6.3	1.6	1.0	1.6	1.2	1.4	1.6	1.8
26	6.3	3.9	3.2	5.7	5.7	1.6	.84	1.4	1.0	1.6	1.6	3.9
27	11	3.9	3.2	3.2	3.2	4290	.84	1.4	1.0	1.4	1.4	3.9
28	3.9	3.2	2.6	12	1.8	821	1.0	1.2	.84	1.8	2.0	3.2
29	3.9	2.6	2.6	13	---	67	1.2	1.4	1.2	2.0	2.0	2.6
30	3.2	2.6	2.0	882	---	3.2	1.2	1.4	1.4	1.8	2.0	2.6
31	3.2	---	2.0	4600	---	20	---	1.6	---	1.6	2.0	---
TOTAL	83.5	477.0	760.7	7085.6	1821.9	6423.39	76.78	40.8	32.16	48.44	53.8	60.6
MEAN	2.69	15.9	24.5	229	65.1	207	2.56	1.32	1.07	1.56	1.74	2.02
MAX	11	168	206	4600	892	4290	34	1.8	1.4	2.0	2.6	3.9
MIN	1.4	1.6	1.2	1.2	1.6	.45	.84	1.0	.64	.84	1.2	1.4
AC-FT	166	946	1510	14050	3610	12740	152	81	64	96	107	120

CAL YR 1978 TOTAL 96074.13 MEAN 263 MAX 13800 MIN .01 AC-FT 190600
WTR YR 1979 TOTAL 16964.67 MEAN 46.5 MAX 4600 MIN .45 AC-FT 33650

11103000 LOS ANGELES RIVER AT LONG BEACH, CA

LOCATION.--Lat 33°49'02", long 118°12'20", in Los Cerritos Grant, Los Angeles County, Hydrologic Unit 18070105, on right bank 5,000 ft (1,524 m) upstream from Willow Street, 3.4 mi (5.5 km) north of Long Beach, and 3.7 mi (6.0 km) upstream from mouth.

DRAINAGE AREA.--827 mi² (2,140 km²).

PERIOD OF RECORD.--December 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 11.91 ft (3.630 m) National Geodetic Vertical Datum of 1929 (levels by Los Angeles County Flood Control District). See WSP 1735 for history of changes prior to Jan. 19, 1956.

REMARKS.--Records fair below 500 ft³/s (14.2 m³/s) and poor above. Flow regulated since September 1940 by Hansen flood-control reservoir, since December 1941 by Sepulveda flood-control reservoir, combined capacity, 49,400 acre-ft (60.9 hm³), and several small flood-control reservoirs. City of Los Angeles stores imported Owens River water in San Fernando and Chatsworth reservoirs and at times discharges imported water into Los Angeles River above station. Many diversions above station for domestic use and irrigation. AVERAGE DISCHARGE represents flow to the ocean, regardless of upstream development. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records were furnished by Los Angeles County Flood Control District.

AVERAGE DISCHARGE.--50 years (water years 1930-79), 185 ft³/s (5.239 m³/s), 134,030 acre-ft/yr (165 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 102,000 ft³/s (2,890 m³/s) Jan. 25, 1969, gage height, 16.00 ft (4.877 m); no flow at times in 1929-30, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 50,900 ft³/s (1,440 m³/s) Mar. 27, gage height, 10.70 ft (3.261 m); minimum daily, 33 ft³/s (0.93 m³/s) Nov. 18, Dec. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	41	50	46	1020	1680	535	173	57	75	78	57
2	70	40	105	46	2620	297	408	168	58	77	71	55
3	67	51	50	55	957	89	244	168	70	77	75	65
4	64	40	49	103	157	58	173	200	71	75	75	67
5	65	46	54	7240	104	55	137	266	64	75	68	65
6	68	48	55	2690	65	54	106	178	51	71	75	65
7	61	42	50	162	68	62	96	178	65	68	73	63
8	57	41	48	95	78	62	83	168	70	65	71	63
9	57	42	33	502	89	62	77	139	173	62	70	63
10	61	914	45	181	87	54	77	135	135	65	71	63
11	58	2940	51	57	88	58	77	128	126	61	68	61
12	53	1530	55	51	73	61	78	118	64	64	68	65
13	53	2010	46	62	73	534	83	124	55	75	78	63
14	51	838	34	340	1450	226	75	118	64	70	65	63
15	48	70	50	4570	299	54	68	82	60	61	67	61
16	46	71	61	6010	98	67	65	78	61	65	68	57
17	48	42	971	467	67	2320	67	82	82	65	67	55
18	37	33	2490	661	65	507	68	71	85	75	65	59
19	37	37	1340	266	73	2230	71	77	73	70	61	57
20	77	39	338	91	92	756	64	80	62	68	61	61
21	64	9350	83	71	4560	285	67	71	64	71	61	57
22	58	8840	53	65	499	136	67	68	80	73	60	63
23	50	288	42	74	1400	58	67	68	95	71	60	57
24	35	106	39	58	173	45	222	236	95	75	58	66
25	36	77	44	57	108	45	222	101	93	78	54	60
26	48	67	49	50	83	50	189	48	95	78	60	66
27	50	61	50	44	78	13000	178	44	95	78	60	69
28	51	50	54	82	70	4970	178	49	89	68	61	70
29	44	60	45	51	---	1900	173	49	83	65	64	60
30	41	49	46	3730	---	914	173	48	83	73	64	76
31	71	---	50	10500	---	710	---	51	---	71	62	---
TOTAL	1695	27863	6530	39285	15370	31399	4188	3564	2410	2169	2043	1880
MEAN	54.7	929	211	1267	549	1013	140	115	80.6	70.0	65.9	62.7
MAX	77	9350	2490	10500	4560	13000	535	266	173	78	75	76
MIN	35	33	33	44	65	45	64	44	51	61	54	55
AC-FT	3360	55270	12950	77920	30500	62280	8310	7070	4880	4300	4050	3730

CAL YR 1978 TOTAL 350490 MEAN 960 MAX 42300 MIN 18 AC-FT 695200
WTR YR 1979 TOTAL 138412 MEAN 379 MAX 13000 MIN 33 AC-FT 274500

11103010 LOS ANGELES RIVER AT WILLOW STREET BRIDGE, AT LONG BEACH, CA
(National stream-quality accounting network station)

LOCATION.--Lat 33°48'16", long 118°12'15", in Los Cerritos Grant, Los Angeles County, Hydrologic Unit 18070105, on the Willow Street bridge, 2.8 mi (4.5 km) upstream from mouth in Long Beach.

DRAINAGE AREA.--831 mi² (2,152 km²).

PERIOD OF RECORD.--Water years 1973 to current year.
CHEMICAL ANALYSES: Water years 1973 to current year.
BIOLOGICAL DATA: Water years 1973 to current year.
SPECIFIC CONDUCTANCE: Water years 1974 to current year.
WATER TEMPERATURES: Water years 1974 to current year.
SEDIMENT RECORDS: Water years 1975 to current year (partial-record station).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1973 to September 1975.
WATER TEMPERATURES: October 1973 to September 1975.

INSTRUMENTATION.--Specific-conductance recorder October 1973 to September 1975. Temperature recorder October 1973 to September 1975.

REMARKS.--Discharge values are from Los Angeles River at Long Beach (station 11103000).

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 2,010 micromhos June 30, 1975; minimum recorded, 117 micromhos Mar. 6, 1975, minimum observed, 91 micromhos May 8, 1977.
WATER TEMPERATURES: Maximum recorded, 34.5°C, Aug. 7, 1975; minimum recorded, 2.0°C Jan. 31, 1975.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT												
27...	1545	46	820	9.8	25.5	5.1	>20.0	--	K260	270	120	71
NOV												
27...	1145	66	950	8.6	15.5	2.0	13.3	--	200	280	110	72
DEC												
20...	1145	394	410	7.8	11.5	160	11.8	K13000	K39000	120	61	35
JAN												
26...	1400	38	1220	8.2	17.5	7.4	12.2	K310	K250	440	240	110
FEB												
27...	1115	74	1400	8.4	15.0	13	--	K130	360	470	280	120
MAR												
22...	1030	310	675	7.7	16.0	110	10.2	--	50000	220	120	57
APR												
26...	1100	151	820	8.3	27.0	84	10.6	3400	560	260	84	66
MAY												
17...	1030	71	975	8.1	18.8	66	12.0	--	15000	340	140	88
JUN												
21...	1030	48	1230	8.2	23.0	3.5	18.0	1000	K25	460	230	120
JUL												
26...	1100	67	1000	8.1	25.0	120	12.6	20000	6400	270	110	65
AUG												
23...	1100	65	1020	7.7	26.0	280	6.1	11000	3300	330	170	86
SEP												
28...	1030	--	1100	7.7	21.5	35	9.4	<41000	4000	230	110	41

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT												
27...	22	95	43	2.5	7.9	150	180	93	.6	24	575	584
NOV												
27...	25	86	39	2.2	8.1	170	190	81	.6	25	630	590
DEC												
20...	8.7	27	31	1.1	4.9	62	66	37	.3	8.8	237	225
JAN												
26...	39	110	35	2.3	6.9	200	320	100	.5	26	873	833
FEB												
27...	41	110	33	2.2	7.7	190	330	100	.6	23	869	847
MAR												
22...	19	54	34	1.6	4.5	100	140	49	.3	11	430	395
APR												
26...	24	67	35	1.8	6.5	180	150	57	.5	23	537	503
MAY												
17...	29	86	35	2.0	8.4	200	190	88	.6	23	669	633
JUN												
21...	40	110	44	2.5	8.5	230	270	130	.6	26	865	843
JUL												
26...	25	80	41	2.4	9.7	160	180	84	.7	27	654	577
AUG												
23...	27	93	37	2.2	9.7	160	210	93	.7	24	686	640
SEP												
28...	31	48	30	1.3	3.6	120	230	92	.7	8.4	733	542

K Results based

< Actual value is known to be less than the value shown.

11103010 LOS ANGELES RIVER AT WILLOW STREET BRIDGE, AT LONG BEACH, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT												
27...	3.1	--	.09	--	1.7	--	1.8	.89	.91	4.9	.89	.37
NOV												
27...	4.1	--	2.9	--	1.0	--	3.9	.10	3.6	8.0	2.70	1.50
DEC												
28...	1.9	--	.75	--	1.9	--	2.6	1.2	1.4	4.5	.81	.53
JAN												
26...	5.3	--	.81	--	1.1	--	1.9	.30	1.6	7.2	1.00	.97
FEB												
27...	4.6	--	.92	--	1.5	--	2.4	.10	2.3	7.0	1.00	1.00
MAR												
22...	3.5	--	.39	--	2.0	--	2.4	1.3	1.1	5.9	.95	.50
APR												
26...	2.6	--	.66	--	2.1	--	2.8	1.5	1.3	5.4	.87	.58
MAY												
17...	3.3	--	.04	--	1.8	--	1.8	.92	.88	5.1	.93	.69
JUN												
21...	2.3	--	.10	--	1.3	--	1.4	.20	1.2	3.7	1.00	.80
JUL												
26...	4.0	--	.04	--	.30	--	.34	.17	.17	4.3	1.70	1.60
AUG												
23...	1.7	--	.08	--	4.4	--	4.5	3.1	1.4	6.2	4.30	1.60
SEP												
28...	4.0	3.8	.08	.04	2.8	1.3	2.9	1.6	1.3	6.9	2.20	1.10

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
OCT			
02...	0700	973	21.5
03...	0730	1000	22.0
04...	0730	1080	20.0
05...	0700	1080	20.5
09...	0730	1040	20.0
10...	0800	984	20.0
11...	0800	985	19.0
12...	0730	980	19.0
16...	0730	1030	19.0
17...	0800	1030	19.0
18...	0730	1040	18.0
19...	0800	1040	18.0
23...	0800	1070	16.0
24...	0730	1080	16.0
27...	1545	820	25.5
30...	0730	1070	17.0
31...	0700	1070	17.0
NOV			
01...	0730	1020	15.0
02...	0700	1020	15.5
06...	0700	1040	16.0
07...	0730	1080	17.0
07...	0800	1040	16.0
09...	0700	1080	16.0
11...	0730	302	14.0
11...	0745	300	14.0
11...	0800	302	13.5
13...	0700	773	12.0
13...	1530	460	14.0
13...	1400	470	14.0
14...	0700	765	9.0
14...	0730	770	12.0
20...	0700	1060	14.0
21...	0700	1060	14.0
21...	1630	162	15.0
21...	1645	183	15.0
22...	1630	283	13.0
27...	1145	950	15.5
27...	1630	966	15.0
28...	1430	962	16.0

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
NOV			
29...	1630	1010	15.0
30...	1645	1010	15.0
DEC			
04...	1630	962	16.0
05...	1600	965	14.5
06...	1630	979	14.0
07...	1545	973	14.0
11...	1530	961	15.5
12...	1600	961	15.0
13...	1530	1050	16.0
14...	1600	1050	15.5
17...	0800	179	13.0
17...	1200	415	13.0
17...	1600	412	13.0
18...	0800	161	12.0
18...	1200	138	12.0
18...	1600	137	12.0
19...	1630	238	14.0
20...	1145	418	11.5
20...	1630	238	14.0
21...	1630	1010	12.0
22...	1630	1000	12.0
23...	1600	1010	13.0
25...	1630	1100	14.0
26...	1600	1100	15.0
28...	1400	1070	13.0
29...	1630	1060	14.0
JAN			
01...	1500	1040	14.0
02...	1530	1040	14.0
03...	1530	976	13.0
04...	1530	980	13.5
08...	1500	1030	17.0
09...	1530	1030	17.5
10...	1530	703	17.0
11...	1500	705	17.0
15...	1500	279	16.0
16...	1530	315	16.0
17...	1500	176	16.0
18...	1530	174	15.0

11103010 LOS ANGELES RIVER AT WILLOW STREET BRIDGE, AT LONG BEACH, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
JAN			
22...	1500	1270	17.0
23...	1530	1210	14.5
24...	1500	1300	16.0
25...	1530	1290	15.0
26...	1400	1220	17.5
29...	1500	1440	13.5
30...	1530	1490	14.0
31...	1500	322	14.0
FEB			
01...	1500	360	14.5
05...	1500	1540	17.0
06...	1530	1540	12.0
07...	1500	1370	20.0
08...	1530	1380	20.0
12...	1500	1070	22.0
13...	1530	1100	23.0
14...	1500	200	18.0
15...	1530	180	18.0
19...	1530	1080	17.0
20...	1500	1090	18.0
21...	1530	250	17.0
22...	1500	240	16.5
26...	1530	1240	20.0
27...	1115	1400	15.0
27...	1500	1310	20.0
28...	1500	1290	22.0
MAR			
01...	1500	1300	22.0
05...	1530	1260	26.0
06...	1500	1260	26.0
07...	1530	1330	25.0
08...	1500	1380	25.0
12...	1530	1280	25.0
13...	1530	1310	25.0
15...	1530	480	24.0
16...	1500	482	24.0
19...	1530	206	16.0
20...	--	204	17.0
21...	1500	555	21.0
22...	1030	675	16.0
22...	1530	532	21.0
26...	1500	1180	25.0
27...	1530	1210	24.5
28...	1500	393	18.0
29...	1530	379	19.0
APR			
02...	1500	803	25.0
03...	1530	800	25.0
04...	1530	897	28.0
05...	1500	968	29.0
08...	1500	1420	24.0
10...	--	1410	24.0
11...	1500	1240	25.0
12...	1530	1250	25.0
16...	1500	1210	25.0
17...	1530	1210	24.0
18...	1530	1270	24.0
19...	1545	1270	24.0
23...	1530	1330	26.0
24...	1500	1360	26.0
25...	1500	910	26.0
26...	1100	820	27.0
26...	1530	909	27.0
30...	1500	851	26.0
MAY			
01...	1530	854	27.0
02...	1500	858	26.0
03...	1530	856	26.5
07...	1530	828	26.0
08...	1515	824	26.0
09...	1500	858	27.0
10...	1520	859	27.0
14...	1500	857	31.0
15...	1530	857	31.0
16...	1500	1010	27.0
17...	1030	975	18.0
17...	1530	1020	27.0
21...	1500	1110	28.0
22...	1530	1100	28.0
23...	1500	1140	32.0
MAY			
24...	1530	1150	32.0
28...	1500	1150	29.0
29...	1530	1140	24.0
30...	1530	1090	24.0
31...	1530	1000	25.0
JUN			
04...	1500	1040	27.0
05...	1500	1050	28.0
06...	1600	1200	25.0
07...	1600	1220	25.0
11...	1630	812	28.0
12...	1600	824	29.0
13...	1600	1100	30.0
14...	1530	1180	29.0
18...	1500	894	27.0
19...	1530	900	28.0
20...	1500	1110	31.0
21...	1030	1230	23.0
25...	1600	910	32.0
26...	1530	900	31.0
27...	1500	910	33.0
28...	1600	920	33.0
JUL			
02...	1500	960	29.0
03...	1530	950	29.0
04...	1500	930	32.0
05...	1530	940	32.0
09...	1500	1080	34.0
10...	1530	1070	34.0
11...	1500	1020	32.0
12...	1530	1040	34.0
16...	1530	950	32.0
17...	--	950	32.5
18...	1500	1000	34.0
19...	1600	1000	34.5
23...	1530	920	33.0
24...	1600	900	33.0
25...	1530	1130	33.5
26...	1100	1000	25.0
26...	1600	1110	33.5
30...	1500	984	31.5
31...	1600	982	30.0
AUG			
01...	1500	1060	32.0
02...	1530	1060	32.0
06...	1500	954	30.0
07...	1545	954	29.0
08...	1500	1060	32.0
09...	1530	1060	33.0
12...	1300	1020	30.0
13...	1330	1020	29.0
15...	1500	1010	30.0
16...	1530	1010	29.5
20...	1500	963	28.0
21...	1530	966	28.0
22...	1500	1040	30.5
23...	1100	1020	26.0
23...	1530	1050	30.0
27...	1500	1000	30.0
28...	1530	1040	30.0
29...	1530	1050	29.0
30...	1530	1050	29.0
SEP			
03...	1500	1080	32.0
04...	1530	1060	30.5
05...	1500	1060	--
06...	1530	1060	--
10...	1500	1110	--
11...	1530	1120	--
12...	1500	1050	--
13...	1530	1060	--
17...	1500	1070	--
18...	1530	1070	--
19...	1500	1090	--
20...	1530	[illegible]	--
24...	[illegible]	1070	--
25...	1530	1070	--
26...	1500	1080	--
27...	1500	1090	--
28...	1030	1100	21.5

11103010 LOS ANGELES RIVER AT WILLOW STREET BRIDGE, AT LONG BEACH, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
OCT										
27...	1545	5	4	--	--	100	--	0	9	10
JAN										
26...	1400	6	6	--	0	90	14	3	11	30
APR										
26...	1100	3	4	200	100	90	25	0	27	20
JUL										
26...	1100	6	6	500	400	100	6	0	9	80

DATE	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)
OCT										
27...	0	10	0	0	0	10	7	11	590	560
JAN										
26...	20	10	2	9	<3	32	17	15	540	530
APR										
26...	10	10	5	2	<3	25	17	8	9600	9600
JUL										
26...	70	10	29	26	<3	92	82	10	56000	56000

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT										
27...	30	40	0	120	40	40	0	.0	.0	.0
JAN										
26...	10	120	0	120	60	20	40	.0	.0	.0
APR										
26...	10	280	10	270	380	230	150	.1	.1	.0
JUL										
26...	330	49	49	0	1400	1400	20	.2	.0	.2

DATE	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT									
27...	9	0	9	0	0	0	60	20	40
JAN									
26...	14	0	14	0	0	0	50	30	20
APR									
26...	2	0	2	0	0	0	70	70	<3
JUL									
26...	2	0	2	0	0	0	200	250	30

< Actual value is known to be less than the value shown.

11103010 LOS ANGELES RIVER AT WILLOW STREET BRIDGE, AT LONG BEACH, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT				
27...	1545	--	12	--
NOV				
27...	1145	8.9	--	--
DEC				
20...	1145	19	--	--
JAN				
26...	1400	--	5.7	.9
FEB				
27...	1115	9.0	--	--
MAR				
22...	1030	18	--	--
APR				
26...	1100	--	27	.5
MAY				
17...	1030	17	--	--
JUN				
21...	1030	10	--	--
JUL				
26...	1100	--	70	27
AUG				
23...	1100	50	--	--
SEP				
28...	1030	26	--	--

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	OCT 27,78	NOV 27,78	DEC 20,78	MAR 22,79
TIME	1545	1145	1145	1030
TOTAL CELLS/ML	21000	4200	1200	5100
DIVERSITY: DIVISION	1.4	1.7	1.3	1.6
.CLASS	1.4	1.7	1.3	1.6
..ORDER	1.9	2.0	2.0	2.3
...FAMILY	2.1	2.5	2.4	3.0
....GENUS	2.1	0.0	2.4	3.1

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	77	6	300	6
...HYDRODICTYACEAE								
....PEDIASTRUM	--	-	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	4	0	--	-	--	-	50	1
....CHODATELLA	--	-	110	3	--	-	--	-
....CLOSTERIOPSIS	--	-	--	-	--	-	50	1
....DICTYOSPHAERIUM	--	-	--	-	--	-	800	16
....OOCYSTIS	230	1	--	-	--	-	--	-
...SCENEDESMACEAE								
....SCENEDESMUS	2700	13	--	-	--	-	500	10
....TETRASTRUM	--	-	--	-	--	-	--	-
..ULOTRICHALES								
...CHAETOPHORACEAE								
....STIGEOCLONIUM	550	3	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE	--	-	220	5	--	-	--	-
....CHLAMYDOMONAS	830	4	180	4	8	1	250	5

See footnotes at end of table.

11103010 LOS ANGELES RIVER AT WILLOW STREET BRIDGE, AT LONG BEACH, CA—Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	OCT 27.78	NOV 27.78	DEC 20.78	MAR 22,79
TIME	1545	1145	1145	1030
TOTAL CELLS/ML	21000	4200	1200	5100
DIVERSITY: DIVISION	1.4	1.7	1.3	1.6
.CLASS	1.4	1.7	1.3	1.6
..ORDER	1.9	2.0	2.0	2.3
...FAMILY	2.1	2.5	2.4	3.0
....GENUS	2.1	0.0	2.4	3.1

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	1500	7	110	3	46	4	600	12
....MELOSIRA	*	0	--	-	--	-	100	2
....STEPHANODISCUS	--	-	73	2	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	8	1	--	-
....RHOICOSPHENIA	--	-	--	-	8	1	--	-
...CYMBELLACEAE								
....CYMBELLA	*	0	36	1	--	-	--	-
...FRAGILARIACEAE								
....FRAGILARIA	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	360	9	8	1	50	1
...GOMPHONEMATACEAE								
....GOMPHONEMA	420	2	150	3	8	1	--	-
...NAVICULACEAE								
....NAVICULA	*	0	73	2	120	10	450	9
...NITZSCHIACEAE								
....NITZSCHIA	1300	6	620	15	180#	16	350	7
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	460	2	--	-	160	14	200	4
....COCCOCHLORIS	--	-	--	-	8	1	--	-
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	--	-	400	9	--	-	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	12000#	60	--	-	540#	45	1400#	27
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....TRACHELOMONAS	*	0	1900#	45	8	1	--	-

See footnotes at end of table.

11103010 LOS ANGELES RIVER AT WILLOW STREET BRIDGE, AT LONG BEACH, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	MAY 17,79	JUN 21,79	AUG 23,79
TIME	1030	1030	1100
TOTAL CELLS/ML	2800	8500	4100
DIVERSITY: DIVISION	1.0	1.1	1.4
.CLASS	1.0	1.1	1.4
..ORDER	1.2	1.5	1.4
...FAMILY	1.8	1.7	1.6
....GENUS	1.8	2.1	1.6

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...COELASTRACEAE						
....COELASTRUM	--	-	--	-	--	-
...HYDRODICTYACEAE						
....PEDIASTRUM	--	-	*	0	--	-
...OOCYSTACEAE						
....ANKISTRODESMUS	20	1	100	1	--	-
....CHODATELLA	--	-	--	-	--	-
....CLOSTERIOPSIS	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-
...SCENEDESMACEAE						
....SCENEDESMUS	1100#	39	4900#	57	2100#	50
....TETRASTRUM	--	-	940	11	--	-
..ULOTRICHALES						
...CHAETOPHORACEAE						
....STIGEOCLONIUM	--	-	--	-	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE	--	-	--	-	--	-
....CHLAMYDOMONAS	20	1	200	2	--	-
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	60	2	640	7	--	-
....MELOSIRA	--	-	--	-	--	-
....STEPHANODISCUS	60	2	--	-	--	-
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	20	1	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	--	-
...CYMBELLACEAE						
....CYMBELLA	--	-	--	-	--	-
...FRAGILARIACEAE						
....FRAGILARIA	--	-	--	-	130	3
....SYNEDRA	--	-	--	-	--	-
...GOMPHONEMATACEAE						
....GOMPHONEMA	--	-	--	-	--	-
...NAVICULACEAE						
....NAVICULA	320	11	130	2	--	-
...NITZSCHIACEAE						
....NITZSCHIA	1200#	44	810	9	510	13
CRYPTOPHYTA (CRYPTOMONADS)						
.CRYPTOPHYCEAE						
..CRYPTOMONADALES						
...CRYPTOMONADACEAE						
....CRYPTOMONAS	--	-	*	0	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....ANACYSTIS	--	-	130	2	--	-
....COCCOCHLORIS	--	-	--	-	--	-
..HORMOGONALES						
...NOSTOCACEAE						
....ANABAENA	--	-	--	-	1400#	34
...OSCILLATORIACEAE						
....OSCILLATORIA	--	-	600	7	--	-
EUGLENOPHYTA (EUGLENOIDS)						
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....TRACHELOMONAS	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

11103010 LOS ANGELES RIVER AT WILLOW STREET BRIDGE, AT LONG BEACH, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PERIPHYTON

DATE	TIME	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	LENGTH OF EXPOSURE (DAYS)
JUN						
21...	1030	4.39	1.20	.3045	2.30	35

PARTICLE-SIZE DISTRIBUTION OF SUSPENED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE, WATER (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
27...	1545	46	25.5	23	41
NOV					
27...	1145	66	15.5	16	72
DEC					
20...	1145	396	11.5	283	97
JAN					
26...	1400	38	17.5	23	71
FEB					
27...	1115	74	15.0	20	99
JUN					
21...	1030	68	23.0	19	63
JUL					
26...	1100	67	25.0	2150	19
AUG					
23...	1100	65	26.0	3590	66

11104000 TOPANGA CREEK NEAR TOPANGA BEACH, CA

LOCATION.--Lat 34°03'52", long 118°35'10", in Boca de Santa Monica Grant, Los Angeles County, Hydrologic Unit 18070104, on right downstream side of bridge abutment on State Highway 27, 1.7 mi (2.7 km) north of Topanga Beach.

DRAINAGE AREA.--18.0 mi² (46.6 km²).

PERIOD OF RECORD.--January 1930 to September 1938, October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 265.60 ft (80.955 m) National Geodetic Vertical Datum of 1929 (levels by Los Angeles County Flood Control District). Prior to June 5, 1940, at different datum. June 5, 1940, to Dec. 9, 1941, at site 400 ft (122 m) upstream at different datum.

REMARKS.--Records fair. No regulation or diversion above station.

COOPERATION.--Records were furnished by Los Angeles County Flood Control District.

AVERAGE DISCHARGE.--48 years (water years 1931-38, 1940-79), 6.00 ft³/s (0.170 m³/s), 4,350 acre-ft/yr (5.36 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,200 ft³/s (346 m³/s) Jan. 25, 1969, gage height, 13.36 ft (4.072 m), from rating curve extended above 610 ft³/s (17.3 m³/s) on basis of slope-area measurement of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,490 ft³/s (70.5 m³/s), Mar. 27, gage height, 7.89 ft (2.405 m); minimum daily, 0.18 ft³/s (0.005 m³/s) Sept. 16-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	.44	.36	.52	45	18	23	3.8	1.4	.76	.44	.36
2	.52	.44	.52	.60	56	10	16	3.8	1.4	.68	.44	.36
3	.52	.44	.44	.44	36	9.0	14	3.4	1.4	.60	.44	.36
4	.52	.44	.52	.60	24	8.5	13	3.4	1.4	.60	.44	.36
5	.60	.44	.60	88	16	8.0	12	3.4	1.4	.60	.44	.36
6	.60	.44	.36	37	14	7.0	12	3.8	1.4	.60	.44	.36
7	.60	.44	.36	5.0	12	6.5	11	3.8	1.4	.52	.36	.36
8	.60	.28	.36	1.8	12	6.0	11	3.4	1.4	.52	.36	.36
9	.52	.28	.44	2.6	10	5.5	11	3.0	.92	.44	.36	.36
10	.44	.28	.52	1.0	9.5	4.6	10	3.0	.84	.44	.36	.20
11	.44	.84	.52	.84	8.5	4.6	9.5	2.6	.84	.36	.36	.20
12	.44	.68	.52	.76	7.5	4.2	9.0	2.2	.76	.44	.36	.36
13	.44	.84	.52	.68	7.5	4.2	8.5	1.8	.76	.44	.44	.36
14	.44	.68	.52	.76	15	3.8	7.5	1.8	.76	.44	.36	.36
15	.36	.52	.52	152	8.5	4.2	7.0	1.8	.76	.44	.36	.20
16	.36	.44	.52	325	8.0	3.8	7.0	1.8	.76	.36	.36	.18
17	.36	.44	2.6	33	6.0	14	7.0	1.8	.76	.36	.36	.18
18	.36	.44	8.5	14	6.0	5.5	6.0	1.8	.76	.36	.36	.18
19	.36	.44	4.2	11	5.0	7.5	5.5	1.8	.92	.28	.36	.18
20	.76	.52	1.4	9.5	5.5	6.0	5.5	1.8	1.0	.28	.36	.18
21	.76	3.4	.92	8.5	42	5.0	5.0	1.8	1.4	.28	.36	.19
22	.44	7.0	.84	7.0	18	4.6	4.6	1.8	1.4	.36	.36	.19
23	.44	.92	.84	6.5	29	4.2	4.6	1.8	1.4	.36	.36	.20
24	.44	.52	.84	5.5	18	3.8	4.6	1.8	1.4	.36	.36	.20
25	.36	.36	.84	5.0	13	3.8	3.8	1.8	1.4	.44	.36	.20
26	.44	.36	.76	3.8	10	3.8	3.4	1.8	1.4	.44	.36	.19
27	.44	.28	.76	3.8	9.5	425	3.4	1.8	2.2	.44	.36	.19
28	.44	.28	.76	3.8	9.0	130	3.4	1.8	1.0	.44	.44	.19
29	.44	.28	.68	3.8	---	63	3.4	1.8	1.0	.36	.44	.20
30	.44	.36	.68	34	---	44	3.4	1.8	.92	.36	.44	.44
31	.44	---	.60	77	---	31	---	1.8	---	.36	.36	---
TOTAL	14.84	23.44	32.82	843.80	460.5	859.1	245.1	73.8	34.56	13.72	11.96	8.01
MEAN	.48	.78	1.06	27.2	16.4	27.7	8.17	2.38	1.15	.44	.39	.27
MAX	.76	7.0	8.5	325	56	425	23	3.8	2.2	.76	.44	.44
MIN	.36	.28	.36	.44	5.0	3.8	3.4	1.8	.76	.28	.36	.18
AC-FT	29	46	65	1670	913	1700	486	146	69	27	24	16

CAL YR 1978 TOTAL 11822.73 MEAN 32.4 MAX 2680 MIN .19 AC-FT 23450
WTR YR 1979 TOTAL 2621.65 MEAN 7.18 MAX 425 MIN .18 AC-FT 5200

11105500 MALIBU CREEK AT CRATER CAMP, NEAR CALABASAS, CA

LOCATION.--Lat 34°04'40", long 118°42'03", in SW¼ sec.18, T.1 S., R.17 W., Los Angeles County, Hydrologic Unit 18070104, on right bank 700 ft (210 m) downstream from Cold Creek, 0.2 mi (0.3 km) downstream from Crater Camp, and 6 mi (10 km) southwest of Calabasas.

DRAINAGE AREA.--105 mi² (272 km²).

PERIOD OF RECORD.--January 1931 to current year.

GAGE.--Water-stage recorder. Datum of gage is 432.82 ft (131.924 m) National Geodetic Vertical Datum of 1929 (levels by Los Angeles County Flood Control District). Prior to Nov. 16, 1954, at datum 2.31 ft (0.704 m) lower.

REMARKS.--Records fair. Flow partly regulated by many small recreational reservoirs. Small diversions above station for domestic use.

COOPERATION.--Records were furnished by Los Angeles County Flood Control District.

AVERAGE DISCHARGE.--48 years, 23.5 ft³/s (0.666 m³/s), 17,030 acre-ft/yr (21.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,800 ft³/s (957 m³/s) Jan. 25, 1969, gage height, 21.43 ft (6.532 m), from rating curve extended above 6,000 ft³/s (170 m³/s) on basis of slope-area measurements at gage heights 17.27 ft (5.264 m) and 21.43 ft (6.532 m); no flow at times in some years prior to 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,420 ft³/s (125 m³/s) Mar. 27, gage height, 9.58 ft (2.920 m); minimum daily, 2.3 ft³/s (0.065 m³/s) Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	11	11	13	329	133	137	28	16	11	7.4	5.8
2	8.3	9.3	14	10	244	100	117	29	15	11	17	5.8
3	9.9	13	12	10	184	77	100	26	14	11	24	6.8
4	9.9	13	12	14	133	69	88	26	16	11	18	8.6
5	6.1	12	14	734	107	64	85	21	16	11	14	6.3
6	7.1	10	14	486	91	58	78	23	16	11	8.0	5.1
7	9.9	9.9	11	82	80	56	75	25	13	10	7.1	6.1
8	11	8.3	11	44	74	53	70	21	12	9.9	5.3	9.0
9	11	7.7	11	43	67	51	69	21	13	11	8.3	5.9
10	9.6	6.3	11	33	64	46	61	19	15	11	14	4.1
11	9.6	6.1	8.3	25	60	43	56	15	14	11	12	2.3
12	9.3	7.7	5.3	21	56	40	57	13	13	10	9.9	3.1
13	8.6	13	8.3	19	53	43	54	15	13	9.3	8.6	6.4
14	9.3	13	10	25	171	57	51	17	11	8.6	9.9	7.7
15	9.6	11	13	340	83	40	49	13	11	7.7	5.6	8.3
16	9.9	11	11	1070	67	40	44	18	11	7.4	7.7	7.1
17	9.9	11	12	220	61	127	40	18	12	8.3	7.4	6.1
18	9.9	10	77	131	56	70	37	18	12	8.0	6.9	6.3
19	9.9	9.3	80	104	54	67	43	16	12	7.7	9.9	8.6
20	10	9.3	25	77	54	72	51	16	11	7.7	11	7.1
21	10	15	21	64	274	56	26	18	11	7.4	11	5.6
22	12	68	17	58	125	44	27	19	13	7.7	11	7.6
23	12	52	16	51	203	36	35	15	11	7.1	11	8.6
24	11	22	16	47	117	32	36	15	11	5.8	7.8	6.0
25	9.6	14	15	43	96	32	37	17	11	7.4	12	4.8
26	9.6	15	15	36	90	32	29	18	11	7.4	12	4.2
27	9.9	13	14	31	80	1220	29	17	11	7.1	11	3.3
28	9.9	12	13	30	72	747	34	14	10	6.1	8.5	3.3
29	9.9	13	14	29	---	302	32	14	9.6	7.4	7.9	4.0
30	13	13	143	147	---	202	26	16	11	7.1	8.0	6.1
31	9.6	---	11	818	---	159	---	17	---	7.1	5.6	---
TOTAL	301.4	438.9	665.9	4855	3145	4168	1673	578	375.6	271.2	317.8	180.0
MEAN	9.72	14.6	21.5	157	112	134	55.8	18.6	12.5	8.75	10.3	6.00
MAX	13	68	143	1070	329	1220	137	29	16	11	24	9.0
MIN	6.1	6.1	5.3	10	53	32	26	13	9.6	5.8	5.3	2.3
AC-FT	598	871	1320	9630	6240	8270	3320	1150	745	538	630	357

CAL YR 1978 TOTAL 41629.9 MEAN 114 MAX 7620 MIN 3.5 AC-FT 82570
WTR YR 1979 TOTAL 16969.8 MEAN 46.5 MAX 1220 MIN 2.3 AC-FT 33660

CALLEGUAS CREEK BASIN

11105850 ARROYO SIMI NEAR SIMI, CA

LOCATION.--Lat 34°16'23", long 118°47'13", SE¼SE¼NW¼ sec.8, T.2 N., R.18 W., Ventura County, Hydrologic Unit 18070103, on left bank 9 ft (3 m) upstream from concrete drop structure, 100 ft (30 m) downstream from intersection of Sinaloa Road and Aristotle Street, in town of Simi Valley, 0.4 mi (0.6 km) northwest of Simi, and 1.0 mi (1.6 km) upstream from Brea Canyon.

DRAINAGE AREA.--69.4 mi² (179.7 km²), revised.

PERIOD OF RECORD.--October 1933 to September 1951, October 1952 to current year. Monthly discharge, in acre-ft only, for October 1933 to September 1951, October 1952 to October 1968, published in WSP 2128.

GAGE.--Water-stage recorder with concrete control since Nov. 16, 1976. Datum of gage is 729.35 ft (222.306 m) National Geodetic Vertical Datum of 1929 (levels by Ventura County Flood Control District). Prior to Nov. 16, 1976 at site 0.6 mi (1.0 km) downstream at different datum.

REMARKS.--Records fair. No regulation above station. Pumping from wells for irrigation. City of Simi Valley intermittently discharged ground water into channel from extraction wells this year.

COOPERATION.--Records were furnished by Ventura County Flood Control District and reviewed by Geological Survey.

AVERAGE DISCHARGE.--11 years (water years 1969-79) 9.46 ft³/s (0.268 m³/s), 6,850 acre-ft/yr (8.45 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,730 ft³/s (219 m³/s) Mar. 4, 1978, gage height, 7.5 ft (2.29 m), from high-water profile past gage; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14.2 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	1700	2,200	62.3	2.81	0.856
Jan. 15	2200	1,510	42.8	2.32	0.707
Jan. 31	0330	1,100	31.2	2.00	0.610
Mar. 18	1400	568	16.1	1.52	0.463
Mar. 27	0845	*4,040	114	4.20	1.280

Minimum daily discharge, 0.50 ft³/s (0.014 m³/s) June 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.8	2.5	2.5	59	46	3.8	2.5	2.8	2.5	2.2	2.1
2	2.2	2.8	2.5	2.5	67	3.5	3.2	2.5	3.2	2.5	2.2	2.0
3	2.2	2.8	2.5	2.5	30	2.8	2.8	2.5	3.8	2.5	2.2	2.0
4	2.2	2.8	2.5	2.5	5.9	2.5	2.8	2.5	3.8	2.5	2.5	2.0
5	2.2	2.8	2.5	627	2.5	2.5	2.8	2.5	2.2	2.5	2.5	2.0
6	2.2	2.8	2.5	77	2.5	2.5	2.8	2.5	.50	2.5	2.5	2.0
7	2.2	2.8	2.5	3.5	2.5	2.5	2.8	2.0	1.3	2.5	2.5	1.9
8	2.2	2.8	2.5	3.5	2.5	2.5	2.8	2.5	2.8	2.5	2.5	1.9
9	2.2	2.2	2.5	23	2.5	2.5	2.8	2.2	2.5	2.5	2.5	1.9
10	2.2	2.7	2.5	3.5	2.5	2.8	3.2	2.2	2.5	2.5	2.5	1.9
11	2.2	15	2.5	2.8	2.5	2.8	2.8	2.2	2.8	2.5	2.5	1.9
12	2.2	2.6	2.5	2.8	2.5	2.8	2.8	2.2	3.2	2.5	2.5	1.8
13	2.2	6.0	2.5	2.8	14	34	2.8	2.2	3.2	2.5	2.5	1.8
14	2.5	3.8	2.5	14	55	3.5	3.2	2.2	3.2	2.5	2.5	1.8
15	2.8	2.5	2.5	354	2.8	15	3.2	2.2	2.5	2.5	2.5	1.8
16	3.2	2.5	2.5	414	4.9	8.3	3.2	2.2	2.5	2.5	2.5	1.8
17	3.2	2.5	5.0	11	2.5	86	3.2	2.2	2.5	2.5	2.5	1.7
18	2.8	2.5	110	8.5	2.5	45	3.2	2.2	2.5	2.5	2.2	1.7
19	2.5	2.5	44	3.2	3.5	25	3.2	2.2	2.5	2.5	2.2	1.7
20	2.8	2.0	6.1	3.2	8.9	7.3	3.2	2.2	2.5	2.2	2.5	1.7
21	2.5	17	4.6	2.8	24	3.5	3.2	2.2	2.5	2.2	2.5	1.7
22	2.5	40	2.5	2.5	29	2.5	3.2	2.2	2.5	2.2	2.2	1.6
23	2.5	2.0	2.5	2.5	18	2.5	3.2	2.2	2.5	2.2	2.2	1.6
24	2.5	2.2	2.5	2.5	3.8	2.5	3.2	2.2	2.5	2.2	2.2	1.6
25	2.5	2.5	2.5	2.5	3.2	2.5	3.2	2.5	2.5	2.2	2.2	1.6
26	2.8	2.5	2.5	2.5	2.8	2.8	2.8	2.5	2.5	2.2	2.2	1.6
27	2.8	2.5	2.5	2.5	2.8	512	2.8	2.8	2.5	2.2	2.2	1.5
28	2.8	2.5	2.5	2.5	3.2	294	2.8	2.8	2.0	2.5	2.1	1.5
29	2.8	2.5	2.5	2.5	---	42	2.8	2.8	2.5	2.5	2.1	1.5
30	2.8	2.5	2.5	97	---	15	2.8	2.8	2.5	2.2	2.1	1.4
31	2.8	---	2.5	223	---	5.4	---	2.8	---	2.2	2.1	---
TOTAL	77.7	145.4	234.7	1906.6	362.8	1184.5	90.6	73.7	77.30	74.5	72.6	53.0
MEAN	2.51	4.85	7.57	61.5	13.0	38.2	3.02	2.38	2.58	2.40	2.34	1.77
MAX	3.2	40	110	627	67	512	3.8	2.8	3.8	2.5	2.5	2.1
MIN	2.2	2.0	2.5	2.5	2.5	2.5	2.8	2.0	.50	2.2	2.1	1.4
AC-FT	154	288	466	3780	720	2350	180	146	153	148	144	105

CAL YR 1978 TOTAL 11915.30 MEAN 32.6 MAX 2350 MIN .60 AC-FT 23630
WTR YR 1979 TOTAL 4353.40 MEAN 11.9 MAX 627 MIN .50 AC-FT 8630

11106400 CONEJO CREEK ABOVE HIGHWAY 101, NEAR CAMARILLO, CA

LOCATION.--Lat 34°14'12", long 118°57'50", T.2 N., R.20 W., Ventura County, Hydrologic Unit 18070103, on left bank 2.6 mi (4.2 km) upstream from U.S. Highway 101, and 4.4 mi (7.1 km) northeast of Camarillo.

DRAINAGE AREA.--64.2 mi² (166.3 km²).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 180 ft (55 m), from topographic map. Mar. 4, 1978 to Oct. 25, 1978, at same site at datum 10.00 ft (3.048 m) lower.

REMARKS.--Records good, except for periods of estimated record which are poor. No regulation or diversion above station. No record Oct. 1-26 and no stage-discharge relationship June 1 to Sept. 30.

COOPERATION.--Records were furnished by Ventura County Flood Control District; one discharge measurement was made and records reviewed by the Geological Survey.

AVERAGE DISCHARGE.--7 years, 22.6 ft³/s (0.640 m³/s), 16,370 acre-ft/yr (20.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,830 ft³/s (278 m³/s) Mar. 4, 1978, gage height, 19.10 ft (5.822 m); maximum gage height, 20.44 ft (6.230 m) Feb. 10, 1978, present datum; minimum daily, 0.13 ft³/s (0.004 m³/s) May 31, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	1830	*7,500	212	18.10	5.517	Jan. 30	2030	1,500	42.5	12.59	3.837
Jan. 15	2300	2,390	67.7	13.80	4.206	Mar. 27	0815	3,940	112	15.40	4.694

Minimum daily discharge, 7.0 ft³/s (0.20 m³/s) Nov. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	12	18	18	142	84	51	25	18	18	18	20
2	12	11	18	20	102	33	50	25	18	18	18	20
3	12	9.1	17	20	53	34	47	24	18	18	18	20
4	12	8.4	17	19	43	28	45	23	18	18	18	20
5	12	7.0	16	1480	34	27	41	20	18	18	18	20
6	12	11	17	188	32	26	36	19	18	18	18	20
7	12	11	17	43	30	24	32	19	18	18	18	20
8	12	12	17	31	26	24	29	19	18	18	18	20
9	12	12	17	44	24	24	28	19	18	18	18	20
10	12	12	17	30	20	24	26	19	18	18	18	20
11	12	69	16	27	20	23	25	19	17	18	19	19
12	12	33	16	25	19	24	25	20	17	18	19	19
13	12	38	15	25	23	36	24	19	17	18	19	19
14	12	16	15	39	106	29	24	19	17	18	19	19
15	12	11	15	434	38	28	23	18	17	18	19	19
16	12	17	17	463	40	26	25	18	16	18	20	19
17	12	13	35	76	37	167	25	18	16	18	20	19
18	12	12	149	79	34	39	25	18	16	18	20	19
19	12	12	99	46	36	101	25	19	16	18	20	19
20	12	12	21	38	41	42	25	18	16	18	20	19
21	12	101	17	34	212	24	25	18	17	18	20	19
22	12	132	14	32	45	21	25	17	17	18	20	19
23	12	34	16	32	111	20	25	18	17	18	20	19
24	12	20	16	32	36	18	26	18	17	18	20	19
25	12	17	16	41	33	18	26	17	17	18	20	20
26	12	17	16	46	33	17	26	16	18	18	20	20
27	12	19	16	52	31	567	26	15	18	18	20	21
28	9.9	17	18	65	31	490	28	16	18	18	20	21
29	9.9	17	18	65	---	138	26	15	18	18	20	21
30	14	17	18	285	---	61	25	15	18	18	20	20
31	12	---	18	339	---	54	---	17	---	18	20	---
TOTAL	369.8	729.5	752	4168	1432	2271	889	580	520	558	595	589
MEAN	11.9	24.3	24.3	134	51.1	73.3	29.6	18.7	17.3	18.0	19.2	19.6
MAX	14	132	149	1480	212	567	51	25	18	18	20	21
MIN	9.9	7.0	14	18	19	17	23	15	16	18	18	19
AC-FT	733	1450	1490	8270	2840	4500	1760	1150	1030	1110	1180	1170

CAL YR 1978 TOTAL 20377.9 MEAN 55.8 MAX 3240 MIN 6.6 AC-FT 40420
WTR YR 1979 TOTAL 13453.3 MEAN 36.9 MAX 1480 MIN 7.0 AC-FT 26680

11106550 CALLEGUAS CREEK AT CAMARILLO STATE HOSPITAL, CA

LOCATION.--Lat 34°10'46", long 119°02'20", in Guadalasca Grant, Ventura County, Hydrologic Unit 18070103, on downstream side of county road bridge, 1.0 mi (1.6 km) northeast of Camarillo State Hospital, and 1.4 mi (2.3 km) downstream from Conejo Creek.

DRAINAGE AREA.--248 mi² (642 km²).

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 58.42 ft (17.806 m) National Geodetic Vertical Datum of 1929 (levels by Ventura County Flood Control District).

REMARKS.--Records good. No regulation above station. Pumping for irrigation in valley 1.0 mi (1.6 km) above station. Sustained flow from city of Thousand Oaks reclamation plant.

COOPERATION.--Records were furnished by Ventura County Flood Control District; one discharge measurement was made and records reviewed by Geological Survey.

AVERAGE DISCHARGE.--11 years, 31.8 ft³/s (0.901 m³/s), 23,040 acre-ft/yr (28.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,700 ft³/s (530 m³/s) March 4, 1978, gage height, 8.38 ft (2.554 m); maximum gage height, 8.50 ft (2.591 m) Feb. 25, 1969; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft³/s (31.2 m³/s) revised, and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	2045	*9,230	261	5.95	1.814	Jan. 31	0730	1,240	35.1	3.00	0.914
Jan. 16	0030	3,650	103	4.53	1.381	Mar. 27	0930	7,590	215	5.40	1.646

Minimum daily discharge, 9.3 ft³/s (0.26 m³/s) several days in October.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	12	11	18	271	152	56	22	22	22	18	20
2	10	13	12	20	168	51	48	22	20	22	20	22
3	12	13	12	20	88	62	45	22	20	22	24	24
4	13	10	12	16	51	53	45	22	20	22	16	20
5	9.3	10	15	2200	48	62	45	20	20	22	16	22
6	9.3	12	15	545	45	45	45	18	16	22	18	22
7	10	18	16	61	40	45	45	18	16	22	16	22
8	9.3	15	16	33	38	53	42	18	16	22	16	22
9	10	13	15	45	38	60	40	18	18	22	15	16
10	12	13	15	26	35	62	38	16	18	22	13	20
11	12	42	15	20	38	59	38	16	15	22	13	24
12	12	54	18	20	40	59	35	16	18	22	13	22
13	12	26	18	16	74	90	33	15	13	22	13	18
14	12	35	12	31	144	86	30	18	13	22	13	16
15	12	13	12	510	42	66	28	18	18	22	13	16
16	12	15	11	1200	42	62	30	22	20	22	16	16
17	12	16	20	109	35	298	28	20	22	24	14	18
18	13	15	192	69	38	40	22	22	20	20	15	18
19	13	15	151	56	40	141	22	22	20	13	15	20
20	13	15	22	30	57	66	28	22	20	20	16	22
21	16	93	15	30	388	65	26	20	24	16	16	22
22	13	221	15	28	81	51	26	18	24	15	14	20
23	13	34	18	26	204	38	28	16	16	15	16	26
24	9.3	16	20	26	59	30	28	15	22	20	16	16
25	9.3	13	20	24	51	48	28	16	22	24	18	16
26	12	11	25	24	48	60	26	16	22	38	18	12
27	15	11	20	24	45	1780	24	15	22	40	20	15
28	12	11	18	26	45	1450	24	16	22	30	20	16
29	12	11	13	20	---	225	24	15	22	24	22	18
30	15	11	15	170	---	50	24	16	22	20	20	22
31	15	---	16	652	---	53	---	20	---	24	18	---
TOTAL	368.8	807	808	6129	2257	5360	1001	570	599	703	507	585
MEAN	11.9	26.9	26.1	198	80.6	172	33.4	18.4	20.0	22.7	16.4	19.5
MAX	16	221	192	2200	388	1780	56	22	24	40	24	26
MIN	9.3	10	11	16	35	30	22	15	13	13	13	12
AC-FT	732	1600	1600	12160	4480	10630	1990	1130	1190	1390	1010	1160

CAL YR 1978 TOTAL 35491.1 MEAN 97.2 MAX 6780 MIN 8.1 AC-FT 70400
WTR YR 1979 TOTAL 19674.8 MEAN 53.9 MAX 2200 MIN 9.3 AC-FT 39020

11107745 SANTA CLARA RIVER ABOVE RAILROAD STATION, NEAR LANG, CA

LOCATION.--Lat 34°25'52", long 118°21'22", in SE¼SW¼SW¼ sec.10, T.4 N., R.14 W., Los Angeles County, Hydrologic Unit 18070102, on downstream side of railroad bridge, 1.1 mi (1.8 km) east of Lang Railroad Station, 1.9 mi (3.1 km) downstream from Agua Dulce Canyon, and 5.2 mi (8.4 km) northeast of Solemint.

DRAINAGE AREA.--157 mi² (407 km²).

PERIOD OF RECORD.--October 1949 to September 1968, October 1969 to current year. Monthly discharge only for 1950-70 published in WDR CA-71-1. Daily discharge available in historical computer files.

GAGE.--Water-stage recorder. Altitude of gage is 1,750 ft (533 m), from topographic map. Prior to Apr. 3, 1970, at site 0.4 mi (0.6 km) downstream at different datum.

REMARKS.--Records poor. No regulation above station. Small diversions for irrigation and recreation. Records for 1978 and 1979 water years not published due to lack of data.

AVERAGE DISCHARGE.--27 years (water years 1950-68, 1970-77), 4.50 ft³/s (0.127 m³/s), 3,260 acre-ft/yr (4.02 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,910 ft³/s (167 m³/s), estimated, Feb. 25, 1969; no flow at times in some years.

NOTE.--Records for current year will not be published due to lack of data.

11107922 SOUTH FORK SANTA CLARA RIVER AT SAUGUS, CA

LOCATION.--Lat 34°24'55", long 118°32'34", in San Francisco Grant, Los Angeles County, Hydrologic Unit 18070102, on upstream side of Magic Mountain Parkway, 800 ft (244 m) west of San Fernando Road in Saugus.

DRAINAGE AREA.--43.4 mi² (112.4 km²).

PERIOD OF RECORD.--October 1975 to current year. September 1967 to September 1975 in files of Los Angeles County Flood Control District.

GAGE.--Water-stage recorder. Altitude of gage is 1150 ft (351 m) from topographic map.

REMARKS.--Records fair. No regulation or diversion above station. Records for water years 1978 and 1979 not published due to lack of data.

COOPERATION.--Records were furnished by Los Angeles County Flood Control District.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 6,800 ft³/s (193 m³/s) Jan. 15, 1952, gage height unknown, from information by Los Angeles County Flood Control District.

NOTE.--Records for current year will not be published because of lack of data.

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA

LOCATION.--Lat 34°23'58", long 118°42'14", in San Francisco Grant, Ventura County, Hydrologic Unit 18070102, on downstream end of old diversion weir on right bank, on private road 0.2 mi (0.3 km) south of Highway 126, 0.8 mi (1.3 km) west of Los Angeles-Ventura County line, and 6.4 mi (10.3 km) west of intersection of Highway 126 and Interstate 5.

DRAINAGE AREA.--625 mi² (1,620 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 794.93 ft (242.295 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Base flow affected by pumping from wells along stream for irrigation. Flow partly regulated since January 1972 by Castaic Reservoir, capacity, 324,000 acre-ft (399 hm³). Imported water from California Water Project stored and released at Castaic Dam.

AVERAGE DISCHARGE.--27 years, 41.9 ft³/s (1.19 m³/s), 30,360 acre-ft/yr (37.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,800 ft³/s (1,950 m³/s) Jan. 25, 1969, gage height, 19.01 ft (5.794 m), from rating curve extended above 9,200 ft³/s (261 m³/s) on basis of field estimate of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 750 ft³/s (21.2 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	2100	5,490	155	6.70	2.042	Feb. 21	1000	1,150	32.6	5.20	1.585
Jan. 15	2400	5,590	158	*6.80	2.073	Mar. 17	0600	1,290	36.5	5.25	1.600
Jan. 31	0800	3,530	100	5.75	1.753	Mar. 27	1045	*6,020	170	6.57	2.003

Minimum daily discharge, 12 ft³/s (0.34 m³/s) for several days in August and September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	72	172	61	450	124	250	68	42	20	19	12
2	56	87	176	61	180	96	250	68	42	21	19	13
3	66	96	179	53	110	87	248	63	43	21	19	13
4	67	106	183	50	90	97	245	74	41	21	19	13
5	65	105	177	1400	80	89	239	82	39	21	19	13
6	65	87	161	393	71	85	231	93	41	21	18	13
7	66	93	162	100	64	169	216	84	39	21	18	13
8	60	114	164	72	57	169	207	87	36	21	17	13
9	59	145	171	70	50	147	203	83	34	20	16	13
10	60	160	174	79	50	154	221	70	36	20	16	12
11	60	61	130	83	47	157	244	77	35	20	16	12
12	61	26	52	88	45	169	256	81	33	20	16	13
13	63	33	49	93	41	200	260	72	31	20	16	13
14	58	30	46	98	79	201	264	83	30	20	16	13
15	58	196	42	980	43	136	229	68	31	20	16	12
16	60	105	38	1710	44	120	229	59	31	19	15	12
17	62	206	35	114	52	376	189	58	32	19	15	12
18	60	233	95	96	55	242	150	57	31	19	16	12
19	56	260	66	105	60	107	154	56	30	18	16	12
20	59	217	28	114	66	117	120	55	30	19	16	12
21	60	99	36	122	311	117	112	54	30	19	16	13
22	58	130	42	122	177	146	89	53	30	19	15	12
23	58	143	111	128	167	179	73	52	27	18	14	13
24	58	146	129	124	84	186	69	52	26	18	14	14
25	58	160	125	103	74	178	56	51	25	18	13	15
26	58	153	126	102	75	103	65	51	23	18	13	15
27	58	157	113	94	73	1090	67	50	22	18	13	16
28	58	160	62	81	70	900	64	50	21	19	12	15
29	59	164	61	69	---	286	54	45	21	19	13	16
30	60	167	65	106	---	260	52	38	21	19	12	18
31	72	---	62	976	---	250	---	40	---	19	12	---
TOTAL	1875	3936	3240	7855	2765	6905	5106	1974	953	605	485	398
MEAN	60.5	131	105	253	98.8	223	170	63.7	31.8	19.5	15.6	13.3
MAX	72	260	183	1710	450	1090	264	93	43	21	19	18
MIN	52	26	28	50	41	85	52	38	21	18	12	12
AC-FT	3720	7810	6430	15580	5480	13700	10130	3920	1890	1200	962	789

CAL YR 1978 TOTAL 65132 MEAN 178 MAX 6580 MIN 16 AC-FT 129200
WTR YR 1979 TOTAL 36095 MEAN 98.9 MAX 1710 MIN 12 AC-FT 71590

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to current year.
CHEMICAL ANALYSIS: Water years 1969, 1972 to current year.
WATER TEMPERATURES: Water years 1969 to September 1978.
SEDIMENT RECORDS: Water years 1969 to September 1978.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1969 to current year.
pH: June to September 1969.
CHLORIDE: June to September 1969.
WATER TEMPERATURES: October 1968 to September 1978.
SEDIMENT RECORDS: October 1968 to September 1978.

INSTRUMENTATION.--Water-quality monitor from June to September 1969. Specific-conductance recorder since June 1969.

REMARKS.--The letter "A" following a date indicates chemical-quality data furnished by California Department of Water Resources. Missing specific-conductance data due to probe or recorder malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 3,000 micromhos Mar. 31, 1971; minimum recorded, 160 micromhos Mar. 17, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 2,200 micromhos Feb. 21, minimum recorded, 160 micromhos Mar. 17.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
NOV												
22...A	1330	140	1330	8.0	13.5	400	--	9.8	--	--	510	--
FEB												
05...A	1255	80	1470	8.5	19.0	55	--	9.7	--	--	600	--
MAR												
29...	1100	286	1170	8.2	15.0	--	790	--	2700	2800	490	290
APR												
25...	1130	53	1404	7.9	23.0	--	40	8.0	25	10	490	240
25...A	1355	69	1230	8.5	24.0	30	--	7.8	--	--	500	--
MAY												
30...	1115	30	1380	7.5	18.0	--	33	8.3	160	79	510	250
JUN												
27...	0945	21	1500	7.9	20.5	--	17	8.6	62	117	560	270
JUL												
23...A	1625	10	1430	8.3	28.5	6	--	7.5	--	--	580	--
31...	0915	19	1500	8.0	19.5	--	11	8.4	223	144	550	260
AUG												
29...	1000	13	1600	7.4	19.5	--	1.0	9.2	290	400	580	290

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
NOV											
22...A	--	--	--	--	--	--	--	440	77	--	--
FEB											
05...A	--	--	--	--	--	--	--	460	81	--	--
MAR											
29...	120	45	81	26	1.6	5.0	200	390	90	.5	18
APR											
25...	120	46	110	33	2.2	5.6	250	400	73	.6	19
25...A	--	--	--	--	--	--	--	380	76	--	--
MAY											
30...	130	46	120	33	2.3	3.8	260	390	76	.3	19
JUN											
27...	140	51	130	33	2.4	6.7	290	450	87	.6	23
JUL											
23...A	--	--	--	--	--	--	--	460	94	--	--
31...	140	49	140	46	2.6	7.8	290	460	90	.7	23
AUG											
29...	150	51	150	36	2.7	5.9	290	400	140	.6	23

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)
NOV											
22...	1100	--	--	--	--	--	--	--	--	--	--
FEB											
05...	1150	--	--	--	--	--	--	--	--	--	--
MAR											
29...	853	839	1.0	.11	3.3	3.4	2.7	.89	4.4	1.40	.80
APR											
25...	982	925	2.6	.15	.41	.56	.19	.37	3.0	.40	.27
25...	1030	--	--	--	--	--	--	--	--	--	--
MAY											
30...	1010	941	3.1	.06	.88	.94	.09	.85	4.0	.77	.69
JUN											
27...	1130	1068	3.0	.03	.87	.90	.82	.66	3.9	--	.86
JUL											
23...	1210	--	--	--	--	--	--	--	--	--	--
31...	1130	1090	2.9	.02	.51	.53	.01	.52	3.4	.94	.99
AUG											
29...	1100	1170	2.2	.07	.65	.72	.21	.91	2.9	.77	.60

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, SUS- PENDED RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM SUS- PENDED RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)
APR										
25...	1130	2	1	100	10	90	--	--	5	10
MAY										
11... A	1220	--	0	--	--	--	--	--	30	--
JUL										
31...	0915	3	2	--	--	70	6	0	6	--

DATE	CHRO- MIUM, SUS- PENDED RECOV. (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, SUS- PENDED RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, SUS- PENDED RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)
APR										
25...	0	10	--	--	<3	30	31	9	4900	4900
MAY										
11... A	--	--	--	--	--	--	--	10	--	--
JUL										
31...	--	10	3	0	<3	8	4	2	1400	1400

< Actual value is known to be less than the value shown.

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
APR 25...	16	--	--	--	120	100	20	.1	.1	.0
MAY 11...A	20	--	--	0	--	--	--	.0	--	--
JUL 31...	10	20	16	4	80	60	20	.0	.0	.0

DATE	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 25...	2	0	2	0	0	0	80	30	50
MAY 11...A	--	--	--	--	--	--	--	--	0
JUL 31...	3	0	3	0	0	0	40	30	10

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
MAR 29...	1100	33	--	--
APR 25...	1130	--	6.9	1.1
MAY 30...	1115	4.5	--	--
JUN 27...	0945	14	--	--
JUL 31...	0915	--	3.6	.4
AUG 29...	1000	10	--	--

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PHYTOPLANKTON

DATE	MAY 30,79
TIME	1115
TOTAL CELLS/ML	1000
DIVERSITY: DIVISION	1.0
.CLASS	1.0
..ORDER	1.7
...FAMILY	2.5
....GENUS	2.5

ORGANISM	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)		
.CHLOROPHYCEAE		
..CHLOROCOCCALES		
...OOCYSTACEAE		
....OOCYSTIS	31	3
..VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS	15	1
CHRYSOPHYTA		
.BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
....CYCLOTELLA	31	3
..PENNALES		
...ACHNANTHACEAE		
....COCCONEIS	31	3
...NAVICULACEAE		
....NAVICULA	62	6
...NITZSCHIACEAE		
....NITZSCHIA	120	12
CYANOPHYTA (BLUE-GREEN ALGAE)		
.CYANOPHYCEAE		
..CHROOCOCCALES		
...CHROOCOCCACEAE		
....ANACYSTIS	120	12
..HORMOGONALES		
...NOSTOCACEAE		
....ANABAENA	170#	16
...OSCILLATORIACEAE		
....OSCILLATORIA	440#	44

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	OCTOBER MAX	OCTOBER MIN	OCTOBER MEAN	NOVEMBER MAX	NOVEMBER MIN	NOVEMBER MEAN	DECEMBER MAX	DECEMBER MIN	DECEMBER MEAN	JANUARY MAX	JANUARY MIN	JANUARY MEAN
1	1300	1230	1260	---	---	---	915	860	888	---	---	---
2	1240	1070	1180	---	---	---	930	890	909	---	---	---
3	1180	1100	1130	---	---	---	935	885	908	---	---	---
4	1130	1090	1110	---	---	---	925	895	906	---	---	---
5	---	---	---	---	---	---	910	860	889	---	---	---
6	---	---	---	---	---	---	930	860	899	1410	805	1220
7	---	---	---	1020	950	987	930	855	895	1600	1410	1480
8	---	---	---	995	935	966	920	875	890	1570	1370	1500
9	---	---	---	935	900	916	915	870	891	1570	1390	1500
10	---	---	---	920	830	896	910	860	882	1500	1400	1450
11	---	---	---	1230	595	932	1170	870	953	1380	1310	1340
12	---	---	---	660	600	631	1290	1110	1240	1320	1130	1260
13	---	---	---	670	635	657	1340	1080	1280	1430	1270	1330
14	---	---	---	675	650	665	1370	1150	1310	1430	1230	1340
15	---	---	---	950	500	830	1380	1100	1270	---	---	---
16	---	---	---	930	880	910	1400	1020	1300	---	---	---
17	---	---	---	910	870	886	1410	1170	1350	---	---	---
18	---	---	---	890	820	871	1580	765	1220	1220	1190	1210
19	---	---	---	880	815	853	1360	805	1170	---	---	---
20	---	---	---	985	840	869	1350	1270	1330	---	---	---
21	---	---	---	1650	985	1170	---	---	---	---	---	---
22	---	---	---	1570	910	1190	---	---	---	---	---	---
23	---	---	---	1230	890	1120	---	---	---	---	---	---
24	---	---	---	1260	880	1090	---	---	---	---	---	---
25	---	---	---	1270	905	1060	---	---	---	---	---	---
26	---	---	---	1280	795	1020	---	---	---	---	---	---
27	---	---	---	1290	780	1010	---	---	---	---	---	---
28	---	---	---	920	875	897	---	---	---	---	---	---
29	---	---	---	905	825	881	---	---	---	---	---	---
30	---	---	---	900	795	870	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	1650	500	924	---	---	---	---	---	---

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	2070	825	1350	1110	1030	1070	---	---	---
2	---	---	---	1480	1190	1350	1120	1010	1060	---	---	---
3	---	---	---	1320	1170	1240	1120	1020	1060	---	---	---
4	---	---	---	1210	1150	1180	1090	1030	1050	---	---	---
5	---	---	---	1190	1050	1130	1070	1030	1050	---	---	---
6	---	---	---	1090	965	1030	1080	1030	1050	---	---	---
7	---	---	---	940	795	867	1070	1040	1050	---	---	---
8	---	---	---	860	795	833	1110	1050	1060	---	---	---
9	---	---	---	925	770	842	1110	1000	1050	---	---	---
10	---	---	---	920	835	875	1160	1010	1080	---	---	---
11	---	---	---	885	835	863	1150	1030	1080	---	---	---
12	---	---	---	915	780	843	1160	1070	1100	---	---	---
13	---	---	---	810	770	785	1140	1070	1100	---	---	---
14	---	---	---	845	770	790	1120	1060	1090	---	---	---
15	---	---	---	950	825	855	1120	1070	1080	---	---	---
16	1510	1470	1490	900	815	841	1110	1090	1090	---	---	---
17	1510	1440	1470	1290	160	444	1150	1100	1110	---	---	---
18	1520	1450	1480	355	325	344	1340	1090	1160	---	---	---
19	1510	1450	1470	360	340	351	1340	1080	1180	---	---	---
20	1750	1440	1490	420	360	388	1370	1110	1190	---	---	---
21	2200	665	1330	430	410	417	1370	1100	1210	---	---	---
22	1540	1410	1470	500	360	390	1190	1150	1170	---	---	---
23	2020	1230	1490	370	335	357	1220	1160	1170	---	---	---
24	1590	1510	1540	355	325	335	1330	1160	1190	---	---	---
25	1520	1390	1430	360	330	345	1440	1330	1360	---	---	---
26	1440	1330	1410	345	330	334	1420	1130	1330	---	---	---
27	1440	1350	1410	1090	160	575	1180	1080	1100	---	---	---
28	1470	1380	1420	1320	450	765	1090	1060	1070	---	---	---
29	---	---	---	1300	915	1150	---	---	---	---	---	---
30	---	---	---	1350	1130	1290	---	---	---	---	---	---
31	---	---	---	1110	1010	1070	---	---	---	1420	1260	1370
MONTH	---	---	---	2070	160	782	1440	1000	1120	---	---	---

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1420	1280	1350	1540	1460	1510	1500	1450	1480	1640	1570	1600
2	1400	1300	1350	1520	1420	1470	1480	1430	1460	1610	1530	1580
3	1400	1290	1360	1510	1430	1470	1500	1420	1460	1580	1500	1550
4	1390	1290	1330	1500	1430	1470	1520	1430	1480	1570	1500	1540
5	1410	1310	1360	1480	1430	1450	1500	1420	1470	1560	1500	1540
6	1420	1310	1370	1490	1430	1460	1520	1420	1480	1560	1520	1540
7	1400	1360	1380	1490	1420	1460	1720	1470	1640	1560	1490	1540
8	1400	1370	1380	1480	1410	1450	1780	1610	1640	1560	1500	1540
9	1410	1370	1390	1520	1410	1460	1680	1580	1630	1560	1500	1540
10	1410	1330	1370	1500	1420	1460	1690	1520	1600	1570	1540	1560
11	1390	1320	1350	1490	1430	1460	---	---	---	1580	1540	1560
12	1390	1340	1360	1490	1440	1460	---	---	---	1580	1490	1550
13	1400	1360	1380	1490	1450	1470	---	---	---	1580	1530	1550
14	1440	1390	1410	1470	1450	1460	---	---	---	1570	1500	1530
15	1460	1410	1430	1480	1440	1460	---	---	---	1600	1540	1560
16	1460	1400	1430	1480	1440	1460	---	---	---	1630	1500	1590
17	1440	1400	1420	1510	1440	1470	---	---	---	1660	1560	1600
18	1450	1390	1420	1540	1460	1500	---	---	---	1650	1530	1580
19	1460	1400	1430	1570	1490	1530	1610	1450	1520	1640	1510	1580
20	1470	1410	1440	1610	1530	1570	1520	1470	1500	1630	1530	1560
21	1480	1410	1440	1650	1560	1600	1620	1490	1560	1690	1550	1590
22	1470	1410	1440	1670	1590	1630	1620	1560	1600	1650	1550	1580
23	1470	1420	1440	1690	1600	1650	1600	1540	1570	1570	1510	1550
24	1480	1430	1450	1700	1620	1660	1590	1510	1550	1550	1500	1530
25	1490	1430	1450	1700	1620	1650	1590	1470	1550	1560	1510	1540
26	1460	1400	1430	1690	1590	1640	1510	1380	1470	1560	1520	1540
27	1590	1410	1510	1700	1590	1620	1550	1420	1480	1560	1510	1530
28	1580	1470	1520	1610	1570	1590	1550	1470	1510	1560	1540	1550
29	1590	1470	1530	1580	1530	1560	1640	1500	1570	1580	1540	1550
30	1580	1520	1550	1530	1510	1520	1660	1520	1610	1560	1510	1530
31	---	---	---	1530	1490	1510	1660	1610	1630	---	---	---
MONTH	1590	1280	1420	1700	1410	1520	---	---	---	1690	1490	1560
YEAR	2200	160	1260									

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAR 29...	1100	206	15.0	3560	59
APR 25...	1130	53	23.0	450	7
MAY 30...	1115	30	18.0	311	26
JUN 27...	0945	21	20.5	265	26
JUL 31...	0915	19	19.5	401	22
AUG 29...	1000	13	19.5	19	60

11109250 LOCKWOOD CREEK AT GORGE, NEAR STAUFFER, CA

LOCATION.--Lat 34°43'57", long 119°02'14", in SE¼SW¼SE¼ sec.31, T.8 N., R.20 W., Ventura County, Hydrologic Unit 18070102, on right bank 2.1 mi (3.4 km) southeast of Stauffer, and 3.8 mi (6.1 km) upstream from Piru Creek.

DRAINAGE AREA.--58.7 mi² (152.0 km²).

PERIOD OF RECORD.--October 1971 to current year.

REVISED RECORDS.--WDR CA-74-1: 1973 (M)

GAGE.--Water-stage recorder. Altitude of gage is 4,790 ft (1,460 m), from topographic map.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--8 years, 6.59 ft³/s (0.187 m³/s), 4,770 acre-ft/yr (5.88 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,070 ft³/s (30.3 m³/s) Mar. 4, 1978, gage height, 7.32 ft (2.231 m), from rating curve extended above 40 ft³/s (1.13 m³/s) on basis of slope-area measurement at gage height 4.92 ft (1.500 m); minimum daily, 0.90 ft³/s (0.025 m³/s) Aug. 5, 9-16, Aug. 19 to Oct. 6, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 14	0330	110	3.12	2.96	0.902
July 20	1730	*217	6.15	3.82	1.164

Minimum daily discharge, 3.2 ft³/s (0.091 m³/s) Oct. 2, 3, 9-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	3.9	3.7	4.3	5.6	16	49	16	9.5	5.4	4.6	4.4
2	3.2	3.9	3.5	4.4	5.4	15	42	16	9.3	5.6	4.6	4.4
3	3.2	3.9	3.7	4.4	5.2	16	37	16	9.2	5.6	4.6	4.4
4	3.4	3.7	3.5	4.4	5.0	18	34	15	9.0	5.6	4.6	4.4
5	3.4	3.5	3.5	4.6	5.0	20	33	15	8.8	5.4	4.6	4.4
6	3.4	3.5	3.5	4.6	5.2	25	32	15	8.6	5.4	4.6	4.5
7	3.4	3.5	3.4	4.6	5.6	39	31	15	8.4	5.2	15	4.5
8	3.4	3.5	3.5	4.6	5.9	46	30	15	8.3	4.8	8.0	4.5
9	3.2	3.7	3.5	5.0	7.1	43	29	15	8.2	4.8	6.0	4.5
10	3.2	3.7	3.7	5.0	11	44	28	14	8.0	4.6	4.5	4.5
11	3.2	4.0	3.7	6.7	11	39	28	14	7.9	4.6	4.5	4.6
12	3.2	4.0	3.7	10	11	34	27	14	7.8	4.8	4.5	4.6
13	3.4	4.2	3.7	7.1	18	35	27	14	7.6	4.6	4.4	4.6
14	3.4	4.0	3.7	6.7	81	32	26	14	7.5	4.6	4.4	4.6
15	3.4	4.0	3.5	7.0	29	31	25	13	7.3	4.6	4.3	4.6
16	3.4	3.9	3.5	7.0	23	36	25	13	7.2	4.6	4.3	4.6
17	3.5	3.9	4.4	7.3	20	44	24	12	7.0	4.6	4.2	4.6
18	3.5	4.0	4.6	7.0	15	42	24	12	7.0	4.6	4.2	4.6
19	3.5	3.9	4.6	7.0	30	47	23	12	6.8	4.7	4.1	4.6
20	3.5	3.7	4.4	6.7	60	52	23	11	6.7	33	4.1	4.6
21	3.5	4.2	4.3	6.7	30	40	22	11	6.6	22	4.1	4.6
22	3.5	4.0	4.0	6.5	20	32	21	11	6.4	11	4.0	4.6
23	3.5	3.9	3.9	6.5	18	27	20	11	6.3	6.8	4.0	4.6
24	3.5	3.9	3.9	6.5	17	24	19	11	6.2	4.8	4.2	4.6
25	3.5	3.7	3.8	6.3	17	23	19	11	6.1	4.6	4.2	4.6
26	3.5	3.5	3.8	5.9	16	29	18	11	5.9	4.6	4.2	4.6
27	3.5	3.4	3.9	5.9	16	39	19	10	5.9	4.6	4.2	4.8
28	3.5	3.5	4.0	5.8	16	51	18	10	5.9	4.6	4.2	4.8
29	3.5	3.5	4.1	5.8	---	57	17	10	5.9	4.6	4.4	4.8
30	3.7	3.5	4.2	5.8	---	63	17	9.8	5.8	4.6	4.4	4.8
31	3.9	---	4.3	5.8	---	57	---	9.6	---	4.6	4.4	---
TOTAL	106.3	113.5	119.5	185.9	509.0	1116	787	396.4	221.1	203.9	150.4	137.3
MEAN	3.43	3.78	3.85	6.00	18.2	36.0	26.2	12.8	7.37	6.58	4.85	4.58
MAX	3.9	4.2	4.6	10	81	63	49	16	9.5	33	15	4.8
MIN	3.2	3.4	3.4	4.3	5.0	15	17	9.6	5.8	4.6	4.0	4.4
AC-FT	211	225	237	369	1010	2210	1560	786	439	404	298	272

CAL YR 1978 TOTAL 5797.6 MEAN 15.9 MAX 430 MIN 1.2 AC-FT 11500
WTR YR 1979 TOTAL 4046.3 MEAN 11.1 MAX 81 MIN 3.2 AC-FT 8030

11109550 PIRU CREEK ABOVE FRENCHMANS FLAT, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1972 to current year.

INSTRUMENTATION.--Specific-conductance recorder since March 1972.

REMARKS.--Gaging station 700 ft (210 m) upstream operated by California Department of Water Resources.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 2,540 micromhos Dec. 29, 1973; minimum recorded, 338 micromhos Nov. 30, 1972, Feb. 13, 1976.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 823 micromhos Jan. 16; minimum recorded, 460 micromhos May 26.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	639	627	634	625	611	619	516	506	511	500	482	494
2	637	623	631	624	606	616	511	507	509	506	496	501
3	632	616	625	622	612	618	511	495	504	507	489	501
4	626	602	620	616	596	603	508	494	501	501	483	493
5	622	608	615	599	585	593	508	494	502	540	470	493
6	617	603	612	591	581	587	519	503	510	694	556	650
7	615	601	610	588	578	585	515	493	506	709	695	701
8	613	603	610	590	576	586	513	479	504	699	671	686
9	613	599	607	595	575	585	504	472	500	664	644	656
10	608	596	604	585	562	575	506	496	502	662	606	632
11	608	598	605	613	587	601	497	487	493	641	601	628
12	608	596	605	614	596	604	495	471	491	636	606	624
13	611	595	605	600	580	592	492	484	488	637	597	616
14	613	601	608	599	591	596	490	480	486	622	582	609
15	615	599	609	601	579	590	493	477	486	798	536	664
16	611	603	608	590	572	583	491	475	485	823	677	765
17	614	602	610	586	578	582	561	465	498	672	620	650
18	614	604	610	581	565	575	606	540	573	679	643	672
19	612	602	609	583	567	577	538	490	512	676	632	658
20	613	603	609	585	565	574	501	481	490	661	633	652
21	613	607	611	600	518	578	485	473	479	648	616	640
22	613	605	610	634	580	608	516	468	498	647	619	636
23	613	601	607	619	581	596	526	510	517	644	620	638
24	610	598	606	581	553	564	516	504	512	648	618	639
25	618	598	606	554	534	542	515	497	507	649	617	637
26	628	608	615	540	526	534	511	495	504	644	614	629
27	615	599	610	535	519	525	508	490	501	615	587	604
28	609	597	606	527	513	520	522	496	502	610	588	600
29	610	598	605	517	509	515	503	489	498	---	---	---
30	650	604	613	514	506	511	503	487	497	---	---	---
31	621	613	619	---	---	---	502	484	494	---	---	---
MONTH	650	595	611	634	506	578	606	465	502	823	470	620

11109550 PIRU CREEK ABOVE FRENCHMANS FLAT, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	556	544	549	704	684	694
2	---	---	---	---	---	---	601	543	572	700	510	604
3	---	---	---	---	---	---	597	583	592	516	498	508
4	---	---	---	---	---	---	608	572	594	510	494	505
5	---	---	---	---	---	---	608	530	582	514	496	505
6	---	---	---	---	---	---	568	506	554	508	490	502
7	772	668	694	556	540	549	574	540	554	510	476	502
8	695	647	673	558	542	552	566	508	549	506	476	499
9	673	619	650	559	539	552	558	526	546	512	494	505
10	648	610	631	558	544	552	570	522	548	504	492	498
11	632	604	616	556	540	551	562	502	549	500	468	483
12	619	589	611	557	543	551	552	504	543	476	466	472
13	623	589	601	566	550	556	546	526	539	478	466	473
14	634	530	595	558	544	553	546	516	535	476	466	472
15	---	---	---	561	529	553	548	494	532	480	462	475
16	---	---	---	562	530	551	542	498	529	482	468	477
17	---	---	---	566	526	555	536	520	527	484	472	478
18	---	---	---	567	533	556	532	500	523	484	472	478
19	---	---	---	580	546	569	530	498	518	482	470	477
20	---	---	---	578	538	568	528	472	514	482	476	479
21	---	---	---	575	527	556	526	486	512	484	468	479
22	---	---	---	569	537	561	520	486	510	484	472	479
23	---	---	---	564	534	555	518	474	510	482	472	477
24	---	---	---	565	537	559	706	492	573	480	472	476
25	---	---	---	565	549	559	720	680	704	498	472	485
26	---	---	---	562	528	557	728	694	716	502	460	496
27	---	---	---	627	521	575	736	696	718	502	492	497
28	---	---	---	575	541	563	724	682	708	500	492	496
29	---	---	---	570	550	560	730	682	709	500	498	498
30	---	---	---	563	523	547	718	698	697	502	488	494
31	---	---	---	559	541	550	---	---	---	500	486	494
MONTH	---	---	---	627	521	556	736	472	577	704	460	496

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	502	484	495	522	492	513	544	518	532	588	572	581
2	502	492	497	520	508	515	548	520	536	596	572	582
3	498	488	494	522	510	515	---	---	---	602	580	586
4	510	492	501	524	500	516	---	---	---	596	580	587
5	518	496	506	522	508	515	542	522	534	598	566	587
6	514	494	505	522	508	515	548	526	540	600	580	589
7	512	498	506	520	506	515	552	526	540	606	562	589
8	512	498	505	520	504	515	548	526	540	596	554	588
9	510	498	504	532	508	519	550	530	543	594	580	589
10	510	498	503	532	514	525	550	528	541	604	580	592
11	510	498	505	532	516	525	554	532	544	602	576	591
12	514	500	506	534	514	526	562	538	548	606	558	591
13	512	500	505	536	512	525	562	546	550	642	574	610
14	526	498	505	536	514	527	566	548	559	656	640	648
15	510	502	505	540	518	529	576	548	568	656	644	650
16	512	504	507	542	518	530	582	536	558	658	638	652
17	520	504	509	538	512	527	566	546	559	672	654	658
18	516	504	510	534	514	526	568	546	561	692	656	664
19	520	504	510	540	516	531	570	554	563	684	656	664
20	526	502	510	542	518	533	580	556	569	698	658	664
21	518	502	508	540	516	530	578	554	565	686	648	663
22	512	502	508	538	516	530	580	548	568	698	644	665
23	514	500	508	538	522	531	576	556	567	670	648	656
24	514	502	508	542	520	532	574	558	569	668	648	657
25	516	498	509	542	522	534	576	548	572	660	616	649
26	516	504	511	546	522	537	576	568	572	660	638	647
27	516	504	511	546	524	536	578	566	573	668	616	647
28	516	502	510	542	522	534	580	566	574	668	634	642
29	516	502	510	540	518	531	578	542	575	642	618	638
30	518	504	512	546	520	534	584	562	575	640	632	631
31	---	---	---	550	520	534	582	572	577	---	---	---
MONTH	526	484	506	550	492	526	584	518	558	698	554	625
YEAR	823	460	561									

11109600 PIRU CREEK ABOVE LAKE PIRU, CA

LOCATION.--Lat 34°31'23", long 118°45'22", in SW¼NE¼NW¼ sec.15, T.5 N., R.18 W., Ventura County, Hydrologic Unit 18070102, on left bank near Blue Point, 1.3 mi (2.1 km) downstream from Agua Blanca Creek, 0.5 mi (0.9 km) upstream from Santa Felicia Dam, and 8.0 mi (12.9 km) northeast of Piru.

DRAINAGE AREA.--372 mi² (963 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,058.55 ft (322.646 m) National Geodetic Vertical Datum of 1929 (levels by U.S. Forest Service). Prior to Dec. 15, 1972, at site 0.3 mi (0.5 km) upstream at different datum.

REMARKS.--Records poor. Flow regulated beginning December 1971 by Pyramid Dam, capacity, 173,500 acre-ft (214 hm³) 15 mi (24 km) upstream. Imported water from the California Water Project stored and released from Pyramid Dam.

AVERAGE DISCHARGE.--16 years (water years 1956-71), 55.1 ft³/s (1.560 m³/s), 39,920 acre-ft/yr (49.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,200 ft³/s (884 m³/s) Feb. 25, 1969, gage height, 18.6 ft (5.669 m), site and datum then in use, from floodmark, from rating curve extended above 4,000 ft³/s (113 m³/s) on basis of slope-area measurement at gage height 12.2 ft (3.719 m) and inflow-outflow records for Lake Piru; no flow in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 2, 1938, 35,000 ft³/s (991 m³/s), is the greatest since that date.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,060 ft³/s (58.3 m³/s) Mar. 28, gage height, 6.03 ft (1.838 m) minimum daily, 11 ft³/s (0.31 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	25	46	38	144	155	1080	78	71	58	40	30
2	28	25	46	38	147	152	773	85	70	60	40	29
3	29	23	46	38	141	150	231	110	71	61	40	29
4	28	23	46	38	123	148	224	110	71	58	41	29
5	28	22	46	125	125	144	210	110	71	60	41	28
6	27	22	45	195	130	144	205	110	71	60	44	26
7	27	22	45	83	128	144	200	110	71	61	40	26
8	27	22	44	63	125	141	198	110	71	58	41	26
9	26	21	44	61	123	141	195	110	71	53	41	25
10	26	21	42	44	108	141	190	110	68	45	40	25
11	25	27	42	36	104	138	170	125	68	44	40	28
12	25	29	42	35	99	138	170	155	70	45	37	28
13	25	29	42	32	186	147	170	155	68	44	33	27
14	25	27	41	33	229	144	170	155	68	45	30	15
15	25	26	41	416	185	141	170	155	68	45	25	12
16	25	25	61	449	249	149	170	155	68	44	25	12
17	25	25	195	266	278	195	170	156	66	44	25	12
18	25	24	225	217	262	150	170	156	71	41	25	12
19	25	24	254	186	262	170	170	155	68	41	25	12
20	25	24	206	149	262	160	170	155	64	41	27	12
21	25	51	183	138	290	155	168	155	63	41	27	12
22	25	73	144	118	270	150	165	155	63	41	26	12
23	26	63	69	168	270	145	163	155	61	41	25	12
24	25	53	65	99	270	142	140	152	64	41	25	12
25	25	50	63	97	270	142	78	130	64	40	28	12
26	24	50	62	93	270	140	78	71	64	41	28	12
27	25	49	61	89	266	1200	78	81	61	41	28	12
28	25	49	60	89	160	1480	78	77	63	40	28	12
29	25	48	60	77	---	1110	78	79	60	41	28	12
30	27	46	60	68	---	1070	78	71	58	40	28	11
31	27	---	39	166	---	1070	---	78	---	38	28	---
TOTAL	803	1014	2245	3612	5390	9760	6240	3755	2006	1481	996	555
MEAN	25.9	33.8	72.4	117	193	315	208	121	66.9	46.8	32.1	18.5
MAX	29	73	254	449	290	1480	1080	155	71	61	44	29
MIN	24	21	39	35	99	138	78	70	58	38	25	11
AC-FT	1590	2010	4450	7160	10710	19360	12380	7450	3980	2880	1980	1100

CAL YR 1978 TOTAL 68733 MEAN 188 MAX 4830 MIN 21 AC-FT 136300
WTR YR 1979 TOTAL 37835 MEAN 104 MAX 1480 MIN 11 AC-FT 75050

11109600 PIRU CREEK ABOVE LAKE PIRU, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1971 to current year.

INSTRUMENTATION.--Specific-conductance recorder since March 1971.

REMARKS.--Periods of missing specific-conductance data due to recorder malfunction, vandalism, and flood damage.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,980 micromhos June 3, 1973; minimum recorded, 292 micromhos Feb. 9, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 832 micromhos June 5; minimum recorded, 308 micromhos Jan. 16.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---				608	588	599	---	---	---
2	---	---	---				590	546	573	---	---	---
3	---	---	---				546	486	507	---	---	---
4	792	766	776				518	490	501	---	---	---
5	788	762	778				516	498	510	---	---	---
6	782	736	764				522	508	517	---	---	---
7	776	730	759				524	512	519	---	---	---
8	772	728	754				524	512	520	---	---	---
9	768	726	751				524	512	520	412	362	376
10	762	716	744				526	512	521	374	366	372
11	758	712	739				526	512	522	376	370	374
12	752	704	732				526	512	521	378	372	374
13	744	698	725				528	512	521	380	370	375
14	738	698	723				528	512	522	404	376	380
15	736	692	718				---	---	---	---	---	---
16	---	---	---				---	---	---	456	308	392
17	---	---	---				---	---	---	462	454	459
18	---	---	---				---	---	---	476	448	456
19	---	---	---				---	---	---	---	---	---
20	---	---	---				---	---	---	---	---	---
21	---	---	---				---	---	---	---	---	---
22	---	---	---				---	---	---	---	---	---
23	---	---	---				---	---	---	---	---	---
24	---	---	---				---	---	---	---	---	---
25	---	---	---				---	---	---	---	---	---
26	---	---	---				---	---	---	---	---	---
27	---	---	---				---	---	---	---	---	---
28	---	---	---				---	---	---	---	---	---
29	---	---	---				---	---	---	---	---	---
30	---	---	---				---	---	---	---	---	---
31	---	---	---				---	---	---	---	---	---
MONTH	---	---	---				---	---	---	---	---	---

11109600 PIRU CREEK ABOVE LAKE PIRU, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1				---	---	---	642	610	634			
2				---	---	---	626	592	610			
3				---	---	---	612	582	604			
4				---	---	---	614	596	601			
5				---	---	---	---	---	---			
6				---	---	---	680	637	658			
7				---	---	---	636	592	615			
8				---	---	---	636	562	597			
9				---	---	---	---	---	---			
10				---	---	---	---	---	---			
11				---	---	---	---	---	---			
12				---	---	---	---	---	---			
13				---	---	---	---	---	---			
14				---	---	---	---	---	---			
15				---	---	---	---	---	---			
16				516	436	470	---	---	---			
17				608	522	572	---	---	---			
18				642	603	625	---	---	---			
19				650	642	647	---	---	---			
20				656	650	653	---	---	---			
21				656	652	655	---	---	---			
22				658	654	655	---	---	---			
23				658	652	656	---	---	---			
24				656	652	655	---	---	---			
25				656	644	651	---	---	---			
26				646	622	632	---	---	---			
27				630	616	625	---	---	---			
28				624	614	620	---	---	---			
29				622	614	618	---	---	---			
30				618	610	615	---	---	---			
31				636	610	626	---	---	---			
MONTH				---	---	---	---	---	---			

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---			
2	---	---	---	---	---	---	---	---	---			
3	---	---	---	---	---	---	---	---	---			
4	---	---	---	---	---	---	---	---	---			
5	832	820	825	---	---	---	---	---	---			
6	830	810	818	674	596	638	---	---	---			
7	820	802	810	682	606	637	---	---	---			
8	---	---	---	654	606	628	---	---	---			
9	---	---	---	668	598	630	---	---	---			
10	---	---	---	672	598	647	---	---	---			
11	---	---	---	686	610	647	---	---	---			
12	---	---	---	---	---	---	---	---	---			
13	---	---	---	---	---	---	---	---	---			
14	---	---	---	---	---	---	706	660	686			
15	---	---	---	---	---	---	706	660	687			
16	---	---	---	---	---	---	706	654	686			
17	---	---	---	---	---	---	698	648	677			
18	---	---	---	---	---	---	694	640	673			
19	---	---	---	---	---	---	694	642	674			
20	---	---	---	---	---	---	688	628	667			
21	---	---	---	---	---	---	690	632	668			
22	---	---	---	---	---	---	---	---	---			
23	---	---	---	---	---	---	---	---	---			
24	---	---	---	---	---	---	---	---	---			
25	---	---	---	---	---	---	---	---	---			
26	---	---	---	---	---	---	---	---	---			
27	---	---	---	---	---	---	---	---	---			
28	---	---	---	---	---	---	---	---	---			
29	---	---	---	---	---	---	---	---	---			
30	---	---	---	---	---	---	---	---	---			
31	---	---	---	---	---	---	---	---	---			
MONTH	---	---	---	---	---	---	---	---	---			
YEAR	832	388	612									

11109700 LAKE PIRU NEAR PIRU, CA

LOCATION.--Lat 34°27'52", long 118°44'57", in Temescal Grant, Ventura County, Hydrologic Unit 18070102, at Santa Felicia Dam on Piru Creek, on left bank 1,000 ft (305 m) upstream from left end of dam, 0.5 mi (0.8 km) downstream from Santa Felicia Canyon, 4.2 mi (6.8 km) northeast of Piru, and 20 mi (32 km) downstream from Pyramid Dam.

DRAINAGE AREA.--425 mi² (1,101 km²).

PERIOD OF RECORD.--May 1955 to current year.

GAGE.--Nonrecording gage. Gage is to National Geodetic Vertical Datum of 1929 (levels by United Water Conservation District). Prior to Jan. 27, 1956, reference point at intake tower at same datum.

REMARKS.--Lake is formed by earthfill dam. Storage began May 20, 1955. Capacity table is based on a survey made in 1975. Capacity below spillway level at elevation 1,055.0 ft (321.56 m), 91,010 acre-ft (112 hm³). Flow regulated since December 1971 by Pyramid Dam 20 mi (32 km) upstream, capacity, 173,500 acre-ft (214 hm³). Imported water from the California Water Project stored behind and released from Pyramid Dam. Water is released from outlet to Piru Creek for ground-water recharge, domestic use, and irrigation on the Oxnard plain.

COOPERATION.--Elevations were furnished by United Water Conservation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 109,400 acre-ft (135 hm³) Feb. 25, 1969, elevation, 1,061.45 ft (323.530); lake dry Oct. 25 to Nov. 20, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 91,500 acre-ft (113 hm³) Apr. 7-10, elevation, 1,055.40 ft (321.686 m); minimum observed, 51,850 acre-ft (63.9 hm³) Dec. 17, elevation, 1,018.65 ft (310.485 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	1,036.15	69,530	--
Oct. 31	1,025.60	58,620	-10,910
Nov. 30	1,021.15	54,240	-4,380
Dec. 31	1,021.15	54,240	0
CAL YR 1978	--	--	+38,700
Jan. 31	1,028.80	61,850	+7,610
Feb. 28	1,040.80	74,600	+12,750
Mar. 31	1,052.80	88,370	+13,770
Apr. 30	1,055.10	91,140	+2,770
May 31	1,055.10	91,140	0
June 30	1,053.50	89,200	-1,940
July 31	1,050.90	86,120	-3,080
Aug. 31	1,038.95	72,560	-13,560
Sept. 30	1,023.40	56,440	-16,120
WTR YR 1979	--	--	-13,090

11109800 PIRU CREEK BELOW SANTA FELICIA DAM, CA

LOCATION.--Lat 34°27'37", long 118°45'04", in Temescal Grant, Ventura County, Hydrologic Unit 18070102, on right bank 750 ft (229 m) downstream from Santa Felicia Dam, 1 mi (2 km) upstream from Lime Canyon, 4 mi (6 km) northeast of Piru, and 20 mi (30 km) downstream from Pyramid Dam.

DRAINAGE AREA.--425 mi² (1,100 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1955 to September 1968, October 1973 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 858.8 ft (261.76 m) National Geodetic Vertical Datum of 1929 (levels by United Water Conservation District).

REMARKS.--Records excellent. Since May 1955 flow regulated by Santa Felicia Dam (Lake Piru, station 11109700) and since December 1971 by Pyramid Dam, capacity 173,500 acre-ft (214 hm³). Imported water from the California Water Project stored by Pyramid Dam. No diversion above station. Spill from Santa Felicia Dam bypasses gage.

COOPERATION.--Records of spill were furnished by United Water Conservation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 544 ft³/s (15.4 m³/s) Aug. 14, 1958, gage height, 3.66 ft (1.116 m); no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 306 ft³/s (8.67 m³/s) Sept. 19-23, 26, 27; minimum daily, 0.39 ft³/s, (0.011 m³/s) Feb. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	203	101	6.9	.56	39	53	.79	6.7	49	194	277
2	210	203	101	7.1	.56	39	17	.82	6.8	49	201	276
3	210	203	101	7.2	.49	39	.91	.84	6.9	49	198	279
4	209	202	101	7.1	.45	39	.94	.82	6.4	48	197	277
5	209	202	101	7.2	.46	39	.95	.82	1.3	49	198	276
6	209	202	101	7.2	.49	39	.99	.85	30	49	208	276
7	209	202	101	7.1	.49	39	1.0	.90	100	49	219	279
8	210	202	101	6.9	.49	39	1.0	.90	100	48	239	280
9	209	202	101	3.3	.46	49	.98	.90	100	59	248	283
10	210	186	100	.67	.46	48	.96	.90	100	75	246	282
11	209	103	100	.62	.47	49	.99	1.0	100	76	247	286
12	209	103	100	.61	.44	48	.97	6.9	100	76	248	293
13	209	53	122	.62	.44	49	.94	6.9	100	76	249	303
14	209	23	148	.60	.45	49	.98	6.9	100	76	246	301
15	209	63	147	.61	.44	48	.98	6.9	100	76	273	299
16	208	100	148	.60	.44	48	.98	7.0	100	76	273	303
17	207	101	62	.61	.44	.91	.91	7.0	100	92	270	304
18	207	100	7.0	.61	.44	.76	.92	7.2	100	101	271	305
19	206	100	6.9	.57	.44	.75	.94	7.0	100	101	274	306
20	206	74	6.9	.55	.45	.77	.94	6.9	100	101	273	306
21	205	13	6.9	.55	.47	29	.94	6.9	100	101	273	306
22	205	4.7	6.9	.55	.44	41	.90	6.9	100	101	273	306
23	202	4.6	6.9	.55	.44	41	.82	6.9	100	41	272	306
24	202	4.7	6.9	.56	.40	41	.82	6.9	100	77	272	305
25	202	4.6	6.9	.55	.39	41	.79	6.9	100	120	270	304
26	202	4.9	6.9	.55	.41	22	.82	6.9	74	146	269	306
27	201	64	6.9	.55	19	.93	.82	6.7	69	150	271	306
28	201	102	6.9	.57	34	.82	.82	6.6	69	160	273	304
29	202	102	6.9	.55	---	.75	.82	6.6	69	150	273	301
30	203	102	6.9	.59	---	31	.77	6.7	69	165	272	295
31	202	---	6.9	.60	---	53	---	6.7	---	176	273	---
TOTAL	6401	3236.9	1932.7	73.25	64.98	927.69	95.52	147.74	2228.1	2742	7786	8836
MEAN	206	108	62.3	2.36	2.32	29.9	3.18	4.77	74.3	88.5	251	295
MAX	210	203	148	7.2	34	53	53	7.2	100	176	274	306
MIN	201	4.6	6.9	.55	.39	.75	.77	.79	1.3	41	194	277
AC-FT	12700	6420	3830	145	129	1840	189	293	4420	5440	15440	17520
a	0	0	0	0	0	0	14840	6590	583	0	0	0

CAL YR 1978 TOTAL 29868.99 MEAN 81.8 MAX 245 MIN 0 AC-FT 59230 AC-FT a 98110
WTR YR 1979 TOTAL 34467.88 MEAN 94.4 MAX 306 MIN .39 AC-FT 68370 AC-FT a 21620

a Combined discharge, in acre-feet, of Piru Creek below Santa Felicia Dam and spill from Santa Felicia Dam.

11109800 PIRU CREEK BELOW SANTA FELICIA DAM, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1974 to current year.

INSTRUMENTATION.--Specific-conductance recorder since February 1974.

REMARKS.--Periods of missing specific-conductance record due to periods of no flow and recorder malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,320 micromhos June 13, 1975; minimum recorded, 482 micromhos Mar. 27, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,000 micromhos several days; minimum recorded, 482 micromhos Mar. 27.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	838	822	830	916	906	910	914	888	905
2	---	---	---	842	828	837	916	902	910	914	890	905
3	898	880	890	844	826	837	916	900	910	914	886	903
4	902	884	894	846	828	839	918	900	909	914	884	903
5	900	878	892	868	---	841	918	904	912	906	850	886
6	904	884	896	872	854	864	922	908	914	912	884	901
7	904	806	853	874	858	867	918	908	914	928	888	908
8	826	796	810	880	858	872	918	910	915	988	886	925
9	814	788	801	888	868	878	918	906	912	---	---	---
10	806	784	794	892	880	886	916	902	909	---	---	---
11	804	778	793	896	890	893	918	898	908	---	---	---
12	816	788	797	898	886	892	918	902	909	---	---	---
13	812	796	806	901	888	893	914	902	909	---	---	---
14	810	794	804	898	882	891	916	900	910	---	---	---
15	810	794	805	898	888	892	914	902	910	---	---	---
16	810	796	805	900	886	894	914	902	910	---	---	---
17	812	794	804	906	892	900	914	904	909	---	---	---
18	812	796	805	910	890	902	914	798	898	---	---	---
19	812	796	805	908	894	903	918	898	908	---	---	---
20	810	792	805	912	896	906	918	898	911	---	---	---
21	814	800	807	916	890	906	914	896	908	---	---	---
22	812	794	805	912	884	902	912	890	904	---	---	---
23	810	798	805	916	886	905	914	888	903	---	---	---
24	810	796	805	912	886	906	914	888	902	---	---	---
25	814	798	807	916	888	905	912	884	903	998	936	977
26	812	798	807	916	886	905	914	886	905	1000	902	966
27	814	796	808	914	894	907	914	886	905	994	942	962
28	820	800	811	914	900	908	916	890	905	996	952	979
29	824	804	816	914	900	908	912	884	902	998	930	975
30	832	820	826	916	896	906	910	884	902	988	882	956
31	832	822	829	---	---	---	916	884	903	958	736	865
MONTH	904	778	820	916	822	886	922	798	904	---	---	---

11109800 PIRU CREEK BELOW SANTA FELICIA DAM, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	988	866	953	988	946	975	982	962	973	958	884	924
2	992	910	956	998	974	983	982	882	947	958	868	917
3	986	930	967	998	972	981	988	866	940	958	900	926
4	992	928	976	986	968	979	986	832	935	968	878	918
5	988	920	967	984	964	977	982	854	929	984	868	916
6	996	916	968	982	966	976	976	842	925	948	896	911
7	992	914	966	984	962	975	978	878	939	944	838	901
8	996	914	969	984	964	976	978	844	934	938	858	905
9	996	904	961	982	970	978	976	888	945	936	838	890
10	994	914	967	986	966	976	986	884	961	926	810	875
11	994	912	969	984	964	975	986	872	946	932	880	873
12	994	914	960	982	962	976	978	812	925	914	880	896
13	994	906	965	988	976	978	958	834	910	910	872	891
14	994	882	954	982	968	976	952	828	908	902	868	885
15	1000	930	975	984	972	978	952	846	910	902	862	883
16	996	930	975	986	972	978	968	854	915	898	858	880
17	998	916	972	992	884	958	966	830	910	892	850	873
18	992	900	961	996	888	952	950	850	907	888	838	865
19	996	944	975	988	918	957	962	818	895	880	822	858
20	998	876	964	984	898	952	926	836	891	874	842	860
21	986	802	941	988	972	979	966	820	900	868	822	849
22	1000	956	977	984	962	973	950	858	911	862	814	839
23	1000	962	977	986	966	976	968	884	913	852	804	830
24	1000	940	975	986	962	974	952	858	914	846	798	823
25	998	900	970	982	964	973	952	868	914	842	788	814
26	1000	926	973	984	926	968	958	862	913	828	774	806
27	992	964	981	968	482	835	952	894	913	828	770	800
28	988	972	981	976	734	878	958	864	915	828	768	796
29	---	---	---	998	884	946	954	872	918	822	776	804
30	---	---	---	994	930	973	952	892	932	824	766	796
31	---	---	---	980	962	972	---	---	---	816	768	791
MONTH	1000	802	968	998	482	964	988	812	922	968	768	864

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	808	784	784									
2	798	758	776									
3	794	752	777									
4	---	---	---									
5	---	---	---									
6	---	---	---									
7	---	---	---									
8	---	---	---									
9	---	---	---									
10	---	---	---									
11	---	---	---									
12	---	---	---									
13	---	---	---									
14	---	---	---									
15	---	---	---									
16	---	---	---									
17	---	---	---									
18	---	---	---									
19	---	---	---									
20	---	---	---									
21	---	---	---									
22	---	---	---									
23	---	---	---									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	---	---	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	---	---	---									
YEAR	1000	482	964									

11110500 HOPPER CREEK NEAR PIRU, CA

LOCATION.--Lat 34°24'03", long 118°49'32", in NE¼NE¼SW¼ sec.25, T.4 N., R.19 W., Ventura County, Hydrologic Unit 18070102, on downstream end of center pier of bridge on State Highway 126, 1 mi (2 km) upstream from mouth, and 2.1 mi (3.4 km) southwest of Piru.

DRAINAGE AREA.--23.6 mi² (61.1 km²).

PERIOD OF RECORD.--October 1930 to September 1932, October 1933 to September 1936, October 1937 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 590 ft (180 m), from topographic map.

REMARKS.--Records good. No regulation above station. Some pumping along stream for irrigation.

COOPERATION.--Records were furnished by Ventura County Flood Control District; one discharge measurement was made and records were reviewed by Geological Survey.

AVERAGE DISCHARGE.--47 years (water years 1931-32, 1934-36, 1938-79) 5.72 ft³/s (0.162 m³/s), 4,140 acre-ft/yr (5.10 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,400 ft³/s (238 m³/s) Jan. 25, 1969, gage height, 12.72 ft (3.877 m), from floodmarks, from rating curve extended above 850 ft³/s (24.1 m³/s) on basis of slope area measurement of maximum flow; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.25 m³/s) and maximum (a):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 17	1800	254	7.19	6.11	1.862
Jan. 5	2030	231	6.54	6.07	1.850
Jan. 15	1000	662	18.7	6.45	1.966
Feb. 14	0300	211	5.98	5.74	1.750
Feb. 21	0300	201	5.69	5.70	1.737
Mar. 27	0650	[a]1,030	29.2	6.63	2.021

Minimum daily discharge, no flow Sept. 15-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	.80	1.4	1.1	22	13	16	4.5	2.0	.52	.15	.09
2	.62	.80	1.5	1.0	19	8.3	16	4.3	1.8	.63	.24	.08
3	.62	.75	1.4	1.1	16	5.8	11	4.2	1.8	.92	.24	.07
4	.62	.71	1.4	1.1	11	5.4	11	4.0	1.8	.92	.24	.06
5	.62	.71	1.3	59	13	4.7	11	3.9	1.8	.76	.19	.06
6	.66	.71	1.3	35	19	4.4	9.9	3.8	1.8	.76	.19	.05
7	.62	.62	1.3	10	19	4.1	9.9	4.0	1.8	.63	.19	.05
8	.62	.54	1.3	6.1	18	4.1	9.2	3.8	1.7	.52	.19	.05
9	.62	.62	1.1	7.7	15	4.1	9.2	3.6	1.5	.52	.19	.05
10	.58	.71	1.0	4.9	11	4.1	8.6	3.4	1.3	.52	.19	.04
11	.58	1.2	1.0	2.7	9.7	3.8	8.0	3.2	1.1	.82	.24	.04
12	.58	1.3	1.0	2.4	7.7	3.8	7.4	3.1	.92	.52	.29	.04
13	.54	1.4	1.0	1.7	8.5	4.1	6.3	2.9	.76	.63	.29	.04
14	.54	1.3	1.0	1.9	63	4.1	6.5	2.8	.76	.63	.35	.03
15	.54	1.1	1.1	177	18	4.4	6.2	2.7	.76	.76	.35	0
16	.58	1.0	1.1	118	8.1	4.7	6.0	2.8	.92	.63	.29	0
17	.66	.98	35	22	6.2	11	6.0	2.7	1.1	.43	.24	0
18	.71	.98	34	12	5.0	6.7	5.9	2.8	1.3	.35	.29	0
19	.71	.98	18	6.5	4.6	8.8	5.9	2.7	1.3	.29	.35	0
20	.75	.98	6.6	4.4	6.1	7.2	5.9	2.6	1.3	.35	.35	0
21	.86	6.1	3.4	3.5	57	5.4	5.8	2.7	1.1	.35	.35	0
22	.86	16	2.4	2.9	16	4.7	5.6	2.5	1.1	.35	.24	0
23	.71	8.2	2.2	2.4	16	4.1	5.7	2.4	1.1	.63	.19	0
24	.71	2.5	1.9	1.8	9.4	3.8	5.7	2.2	1.1	.35	.19	0
25	.75	2.0	1.6	1.7	7.7	3.5	5.6	2.2	1.1	.29	.19	0
26	.86	1.6	1.4	1.5	6.7	3.5	5.5	2.2	.92	.29	.15	0
27	.75	1.5	1.4	1.4	5.8	190	5.3	2.2	.76	.19	.15	0
28	.62	1.6	1.3	1.6	5.4	220	5.1	2.2	.76	.19	.15	0
29	.66	1.4	1.3	1.5	---	48	4.9	2.2	.63	.15	.12	0
30	.75	1.4	1.2	4.3	---	24	4.7	2.1	.52	.15	.11	0
31	.86	---	1.2	28	---	18	---	7.0	---	.15	.10	---
TOTAL	20.78	60.29	132.1	526.2	413.9	641.6	230.0	97.7	36.61	14.78	6.99	.75
MEAN	.67	2.01	4.26	17.0	14.8	20.7	7.67	3.15	1.22	.47	.23	.025
MAX	.86	16	35	177	63	220	16	7.0	2.0	.92	.35	.09
MIN	.54	.54	1.0	1.0	4.6	3.5	4.7	2.1	.52	.15	.10	0
AC-FT	41	120	262	1040	821	1270	456	194	73	29	14	1.5

CAL YR 1978 TOTAL 10504.10 MEAN 28.8 MAX 1060 MIN .24 AC-FT 20830
WTR YR 1979 TOTAL 2181.62 MEAN 5.98 MAX 220 MIN 0 AC-FT 4330

11111500 SESPE CREEK NEAR WHEELER SPRINGS, CA

LOCATION.--Lat 34°34'40", long 119°15'25", in SE¼NW¼SW¼ sec.30, T.6 N., R.22 W., Ventura County, Hydrologic Unit 18070102, on right bank at Sespe Gorge, 1.6 mi (2.6 km) upstream from Tule Creek, and 5 mi (8 km) northeast of Wheeler Springs.

DRAINAGE AREA.--49.5 mi² (128.2 km²).

PERIOD OF RECORD.--October 1947 to current year. Daily discharge for period October 1947 to July 1948 estimated on basis of weather records and records for North Fork Matilija Creek.

GAGE.--Water-stage recorder. Datum of gage is 3,500.65 ft (1,066.998 m) National Geodetic Vertical Datum of 1929 (levels by Ventura County Flood Control District).

REMARKS.--Records good except those for period of no gage-height record, Dec. 18 to Jan. 22, which are fair.

AVERAGE DISCHARGE.--32 years, 12.3 ft³/s (0.348 m³/s), 8,910 acre-ft/yr (11.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft³/s (303 m³/s) Feb. 10, 1978, gage height, 14.18 ft (4.322 m), from rating curve extended above 640 ft³/s (18.1 m³/s) on basis of slope-area measurement at gage height 13.60 ft (4.145 m); no flow many days in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.42 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	Unknown	Unknown		Unknown		Feb. 21	0515	166	4.70	3.58	1.091
Jan. 15	Unknown	Unknown		Unknown		Mar. 28	0200	*877	24.8	5.43	1.655
Feb. 14	0215	692	19.6	4.98	1.518						

Minimum daily discharge, 1.1 ft³/s (0.031 m³/s) Sept. 12-27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	3.7	5.0	3.7	12	29	103	15	6.0	2.7	1.8	1.6
2	2.8	3.7	4.9	3.7	12	24	84	15	5.9	2.9	1.7	1.6
3	2.8	3.4	4.7	3.7	11	21	71	14	5.8	3.0	1.7	1.5
4	2.8	3.4	4.7	3.7	11	20	62	13	5.4	2.9	1.7	1.5
5	2.8	2.8	4.7	31	14	21	56	13	5.3	2.9	1.7	1.4
6	2.5	2.8	4.7	35	22	21	50	13	5.1	2.8	1.7	1.4
7	2.5	2.8	4.9	18	35	22	46	13	5.1	2.7	1.7	1.3
8	2.5	2.8	5.0	13	36	22	42	13	5.5	2.6	1.7	1.2
9	2.5	2.8	5.0	11	37	21	39	13	5.4	2.5	1.8	1.2
10	2.8	3.1	4.7	10	37	20	36	12	5.0	2.4	1.7	1.2
11	2.5	7.7	4.7	9.0	36	19	34	12	4.9	2.4	1.7	1.2
12	2.5	7.1	4.7	8.0	37	18	32	11	4.9	2.2	1.7	1.1
13	2.2	7.5	4.7	7.0	71	22	29	11	4.9	2.3	1.8	1.1
14	2.2	6.6	5.0	6.4	329	20	28	10	4.8	2.2	1.8	1.1
15	2.2	6.2	5.0	110	106	20	26	10	4.7	2.2	1.8	1.1
16	2.5	5.4	5.2	100	73	20	26	9.9	4.6	2.2	1.8	1.1
17	2.5	5.0	10	52	62	27	26	9.4	4.5	2.2	1.7	1.1
18	2.8	4.7	12	33	96	25	25	9.1	4.4	2.0	1.7	1.1
19	2.8	4.7	8.6	25	90	25	25	9.3	4.3	2.1	1.7	1.1
20	2.8	4.7	6.5	21	53	23	25	9.0	4.2	2.2	1.7	1.1
21	2.8	6.2	5.7	17	103	22	24	8.8	4.1	2.8	1.7	1.1
22	2.8	7.0	5.2	15	52	21	21	8.5	3.9	2.5	1.7	1.1
23	2.8	7.0	5.0	14	43	20	20	7.9	3.8	2.2	1.6	1.1
24	2.5	6.9	4.8	13	36	20	19	7.6	3.6	2.2	1.6	1.1
25	2.8	6.4	4.6	13	31	19	18	7.4	3.5	2.1	1.5	1.1
26	2.8	5.8	4.4	11	29	20	18	7.3	3.3	2.1	1.5	1.1
27	2.8	5.4	4.2	10	26	348	18	7.1	3.2	2.1	1.5	1.1
28	2.8	5.4	4.0	10	25	586	16	7.2	2.7	2.0	1.4	1.2
29	2.8	5.4	3.9	9.9	---	280	16	7.3	2.7	2.0	1.5	1.4
30	3.4	5.0	3.8	10	---	182	15	7.0	2.6	1.9	1.6	1.7
31	4.0	---	3.7	14	---	130	---	6.4	---	1.9	1.6	---
TOTAL	84.1	151.4	164.3	641.1	1445	2088	1050	317.2	134.1	73.2	51.8	37.0
MEAN	2.71	5.05	5.30	20.7	51.6	67.4	35.0	10.2	4.47	2.36	1.67	1.23
MAX	4.0	7.7	12	110	329	586	103	15	6.0	3.0	1.8	1.7
MIN	2.2	2.8	3.7	3.7	11	18	15	6.4	2.6	1.9	1.4	1.1
AC-FT	167	300	326	1270	2870	4140	2080	629	266	145	103	73

CAL YR 1978 TOTAL 28136.0 MEAN 77.1 MAX 3360 MIN 1.0 AC-FT 55810
WTR YR 1979 TOTAL 6237.2 MEAN 17.1 MAX 586 MIN 1.1 AC-FT 12370

11113000 SESPE CREEK NEAR FILLMORE, CA

LOCATION.--Lat 34°27'03", long 118°55'30", in NE¼NW¼NE¼ sec.12, T.4 N., R.20 W., Ventura County, Hydrologic Unit 18070102, on right bank 0.1 mi (0.2 km) downstream from Little Sespe Creek, and 3.5 mi (5.6 km) north of Fillmore.

DRAINAGE AREA.--251 mi² (650 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1911 to September 1913, October 1927 to current year; combined records of creek and canal, October 1927 to current year. Prior to 1935, published as "at Sespe."

GAGE.--Water-stage recorder on creek; water-stage recorder and Parshall flume on canal. Altitude of creek gage is 580 ft (177 m), from topographic map. Canal gage is at different datum. See WSP 1315-B for history of changes prior to Jan. 17, 1946.

REMARKS.--Records good except those for period of no gage-height record, Apr. 6 to May 7, which are fair. No regulation above station. Fillmore Irrigation Co. has diverted water 1 mi (2 km) upstream since September 1911. For records of combined discharge of Sespe Creek and Fillmore Irrigation Company's canal, see following page.

AVERAGE DISCHARGE.--Creek only: 54 years, 111 ft³/s (3.144 m³/s), 80,420 acre-ft/yr (99.2 hm³/yr).

Combined creek and canal: 52 years, 117 ft³/s (3.313 m³/s) 84,770 acre-ft/yr (105 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 73,000 ft³/s (2,070 m³/s) Feb. 10, 1978, gage height, 22.40 ft (6.828 m), from rating curve extended above 17,000 ft³/s (481 m³/s) on basis of slope-area measurement at gage height 22.40 ft (6.828 m); maximum gage height, 24.95 ft (7.605 m) Feb. 25, 1969, from debris wave; no flow at times in some years.

Combined creek and canal: Maximum discharge, 73,000 ft³/s (2,070 m³/s) Feb. 10, 1978; minimum daily, 1.1 ft³/s (0.031 m³/s) July 31, Aug. 2, 1951.

EXTREMES FOR CURRENT YEAR.--Creek only: Peak discharges above base of 1,300 ft³/s (36.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 15	1045	4,820	137	13.08	3.987	Feb. 21	0300	1,490	42.2	10.62	3.237
Feb. 14	0700	3,700	105	12.54	3.822	Mar. 28	0515	*6,300	178	14.32	4.365

Minimum daily discharge, 5.9 ft³/s (0.167 m³/s) Sept. 16-29.

Combined creek and canal: Maximum discharge, 6,300 ft³/s (178 m³/s) Mar. 28; minimum daily, 11 ft³/s (0.312 m³/s) Sept. 15-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	21	35	39	350	270	782	143	52	20	9.4	7.3
2	16	17	34	39	266	241	714	137	52	20	8.8	9.2
3	15	17	33	39	222	212	628	131	50	20	8.5	9.1
4	16	17	32	38	195	203	570	126	49	21	8.4	7.5
5	16	17	32	347	202	198	535	120	48	21	8.0	7.7
6	16	18	31	665	266	196	490	114	48	20	7.9	6.7
7	16	18	30	198	297	200	455	110	47	19	7.8	6.6
8	16	16	29	133	307	207	420	107	47	18	7.5	6.8
9	16	16	26	125	296	204	390	103	46	16	7.7	7.7
10	16	16	26	117	279	194	360	98	44	16	7.5	8.1
11	14	19	26	103	250	189	335	92	44	16	7.1	8.0
12	16	24	26	131	247	186	315	89	42	16	7.4	6.9
13	16	24	26	116	264	190	295	82	42	15	7.5	6.7
14	16	24	26	98	2090	192	275	77	41	15	7.6	6.4
15	16	24	26	1620	703	181	260	75	40	15	7.8	6.3
16	16	22	26	1460	511	182	250	73	38	14	7.7	5.9
17	16	20	191	537	390	234	240	72	37	13	7.7	5.9
18	16	20	226	333	325	210	230	70	38	11	7.8	5.9
19	16	20	169	250	290	253	220	68	38	12	7.7	5.9
20	16	21	95	210	290	244	210	67	37	12	7.8	5.9
21	15	60	67	175	819	221	202	67	37	11	8.0	5.9
22	15	80	96	148	496	205	194	64	37	11	7.9	5.9
23	16	54	91	132	456	192	188	63	36	12	8.0	5.9
24	16	50	60	120	381	182	182	62	33	12	8.4	5.9
25	15	46	65	114	316	178	176	60	31	12	9.3	5.9
26	16	43	63	111	305	177	167	57	28	11	9.3	5.9
27	15	40	61	107	298	2370	160	56	22	10	8.6	5.9
28	16	36	60	102	260	3650	156	55	21	9.9	8.7	5.9
29	16	37	39	98	---	1690	150	55	20	9.7	9.3	5.9
30	15	36	39	110	---	1110	146	54	20	9.3	9.7	6.1
31	17	---	39	376	---	888	---	53	---	9.3	8.9	---
TOTAL	495	888	1653	7971	11327	15467	9695	2600	1168	447.2	253.7	199.7
MEAN	16.0	29.6	53.3	257	405	499	323	83.9	38.9	14.4	8.18	6.66
MAX	17	80	226	1620	2090	3650	782	143	52	21	9.7	9.2
MIN	14	16	26	38	195	177	146	53	20	9.3	7.1	5.9
AC-FT	983	1760	3280	15810	22470	30680	19230	5160	2310	887	503	396

CAL YR 1978 TOTAL 209556.0 MEAN 574 MAX 20800 MIN 14 AC-FT 415700
WTR YR 1979 TOTAL 51691.6 MEAN 142 MAX 3650 MIN 5.9 AC-FT 102500

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF SESPE CREEK AND FILLMORE IRRIGATION CO.'S CANAL NEAR FILLMORE, CA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	28	35	39	350	270	782	148	59	28	15	14
2	22	24	34	39	264	241	714	145	59	29	15	14
3	23	25	33	39	222	212	628	140	58	29	15	15
4	22	24	32	38	195	203	570	135	56	30	15	14
5	22	24	32	347	202	198	535	128	55	30	14	14
6	22	24	31	445	244	194	490	122	55	29	14	13
7	22	24	30	[illegible]	297	200	455	118	54	28	14	13
8	22	24	30	133	307	207	420	114	53	27	13	12
9	22	24	29	125	294	204	390	110	51	24	13	13
10	22	24	29	117	279	194	360	108	50	24	13	13
11	22	24	29	103	258	189	335	101	50	24	13	13
12	22	24	29	131	247	186	315	98	48	23	13	13
13	21	24	29	116	264	190	295	91	48	23	13	12
14	21	24	29	98	2090	192	275	85	47	22	14	12
15	21	24	29	1620	783	181	260	83	47	22	14	11
16	21	24	29	1460	511	182	250	81	46	21	14	11
17	22	24	193	537	390	234	240	80	46	21	14	11
18	22	24	226	333	325	210	230	78	47	19	14	11
19	22	24	169	250	290	253	220	76	47	18	14	11
20	22	24	95	210	290	244	210	75	46	18	13	11
21	23	76	[illegible]	175	619	221	202	75	46	19	13	11
22	23	88	[illegible]	148	494	205	194	72	45	18	13	11
23	22	[illegible]	51	132	454	192	188	69	43	19	13	11
24	21	[illegible]	40	120	361	182	182	67	42	19	13	11
25	21	60	45	114	314	178	176	66	42	19	13	11
26	22	43	43	111	285	177	170	65	38	19	13	11
27	22	40	41	107	258	2370	165	64	32	17	13	11
28	22	38	40	102	248	3650	160	63	30	17	13	11
29	22	37	39	98	---	1690	156	63	29	17	13	11
30	22	36	39	110	---	1110	150	62	28	16	14	12
31	25	---	39	376	---	888	---	61	---	16	14	---
TOTAL	682	983	1680	7971	11327	15047	9717	2843	1397	685	422	362
MEAN	22.0	32.8	54.2	257	405	485	324	91.7	46.6	22.1	13.6	12.1
MAX	25	88	226	1620	2090	3650	782	148	59	30	15	15
MIN	21	24	29	38	195	177	150	61	28	16	13	11
AC-FT	1350	1950	3330	15810	22470	29850	19270	5640	2770	1360	837	718

CAL YR 1978 TOTAL 210500 MEAN 577 MAX 28000 MIN 21 AC-FT 417700
WTR YR 1979 TOTAL 53116 MEAN 146 MAX 3650 MIN 11 AC-FT 105400

11113000 SESPE CREEK NEAR FILLMORE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956-62, 1967 to current year.
CHEMICAL ANALYSES: Water years 1967 to current year.
WATER TEMPERATURES: Water years 1967 to September 1978.
SEDIMENT RECORDS: Water years 1956-62, 1967 to September 1978.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1969 to current year.
SEDIMENT RECORDS: October 1966 to September 1978.

INSTRUMENTATION.--Specific-conductance recorder since October 1969.

REMARKS.--Periods of missing specific-conductance data due to probe silted, not in contact with water, or recorder malfunction.

COOPERATION.--Chemical-quality records were furnished by California Department of Water Resources.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,590 micromhos Dec. 17, 1977; minimum recorded, 112 micromhos Feb. 9, 1978.
WATER TEMPERATURES: (Water year 1970): Maximum 29.5°C July 4, 18, 20, 1970; minimum, 4.5°C Jan. 4, 1970.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 33,800 mg/L Mar. 4, 1978; minimum daily, 1 mg/L on many days in 1966-69 and 1976-77.
SEDIMENT DISCHARGE: Maximum daily, 3,280,000 tons (2,976,000 metric tons) Feb. 9, 1978; minimum daily, 0 tons on many days in most years.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 936 micromhos Jan. 3, 4; minimum recorded, 154 micromhos Mar. 27.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
NOV											
22...	1600	80	930	8.4	10.5	150	10.3	430	340	40	823
FEB											
05...	1535	195	760	8.8	8.5	6	11.5	390	280	14	602
APR											
25...	1040	176	690	8.7	17.0	5	9.4	360	260	13	624
MAY											
11...	1635	93	--	--	19.0	--	--	--	--	--	--
JUL											
23...	1250	12	730	8.6	28.5	0	10.1	310	270	40	628

DATE	TIME	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAY								
11...	1635	0	0	10	0	0	.0	0

11113000 SESPE CREEK NEAR FILLMORE, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1										---	---	---
2										---	---	---
3										936	924	931
4										936	920	929
5										929	465	754
6										599	461	540
7										657	589	613
8										707	657	682
9										736	708	724
10										746	720	732
11										752	738	747
12										744	720	735
13										739	625	674
14										669	625	648
15										677	531	601
16										---	---	---
17										---	---	---
18										---	---	---
19										788	734	765
20										819	787	802
21										829	815	823
22										839	827	833
23										848	838	843
24										850	844	847
25										854	846	850
26										860	852	856
27										865	859	862
28										873	865	868
29										875	871	872
30										873	707	843
31										752	380	546
MONTH										936	380	766

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	628	422	549	698	658	680	594	576	587	712	700	703
2	636	582	619	704	688	696	614	598	606	712	702	709
3	696	628	670	716	704	710	626	614	622	714	708	711
4	754	702	727	718	712	716	638	624	631	716	708	712
5	758	706	732	718	702	708	644	616	631	716	710	713
6	738	642	703	708	694	700	644	620	632	722	712	716
7	718	622	665	702	676	691	646	628	638	722	698	708
8	694	618	655	670	652	663	[illegible]	638	646	712	702	706
9	690	616	655	664	642	654	[illegible]	644	652	716	708	712
10	696	634	672	666	644	654	[illegible]	644	651	718	710	713
11	700	662	683	670	660	664	668	650	661	720	708	714
12	706	668	691	670	656	661	676	668	674	718	708	713
13	714	576	693	666	650	656	680	668	677	722	710	717
14	564	244	366	676	662	667	668	658	664	724	712	719
15	566	430	507	680	672	675	664	652	658	726	710	718
16	620	570	599	682	660	675	666	650	658	724	708	717
17	660	622	644	672	624	646	668	654	660	722	708	717
18	686	664	675	702	656	683	674	658	665	721	703	713
19	698	684	691	702	638	667	686	674	680	723	701	713
20	702	634	695	684	654	673	696	686	690	721	703	714
21	572	340	467	696	672	682	696	690	694	721	701	711
22	574	510	546	702	692	696	698	690	695	719	693	708
23	592	504	569	704	694	699	698	690	694	715	687	702
24	630	592	615	710	702	705	700	688	694	711	683	702
25	656	634	646	712	704	708	698	692	695	709	679	698
26	674	654	665	712	700	706	700	694	697	717	695	705
27	686	674	680	696	154	375	702	690	695	717	709	713
28	698	686	692	404	272	340	696	686	690	707	699	703
29	---	---	---	498	408	451	698	690	695	705	695	702
30	---	---	---	544	500	523	702	694	700	705	677	694
31	---	---	---	574	546	561	---	---	---	707	673	693
MONTH	758	244	635	718	154	645	702	576	684	726	673	709

11113000 SESPE CREEK NEAR FILLMORE, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	756	695	715	826	792	811	906	844	874	---	---	---
2	748	736	740	876	820	822	920	824	853	---	---	---
3	792	744	752	850	808	830	858	812	836	---	---	---
4	762	756	758	856	808	831	864	796	838	---	---	---
5	770	762	765	854	810	832	870	782	837	886	794	857
6	776	770	772	856	810	833	876	810	846	904	814	865
7	784	776	778	852	808	830	882	752	837	898	802	863
8	788	778	784	860	776	821	894	798	851	896	760	849
9	798	730	778	832	788	807	---	---	---	884	742	842
10	780	758	765	830	782	810	---	---	---	892	806	850
11	790	780	783	830	788	810	---	---	---	876	814	849
12	800	786	792	830	788	810	---	---	---	890	784	847
13	802	794	797	830	794	813	---	---	---	890	804	844
14	806	796	801	834	790	813	---	---	---	876	796	836
15	834	790	796	836	794	815	---	---	---	874	790	844
16	798	766	783	844	804	822	---	---	---	888	812	854
17	782	774	777	846	806	825	---	---	---	900	816	854
18	780	756	778	856	808	831	---	---	---	894	810	848
19	798	760	781	850	804	826	---	---	---	892	804	842
20	802	764	789	848	808	827	---	---	---	890	794	841
21	808	794	801	856	808	831	---	---	---	900	762	835
22	806	790	799	860	812	834	---	---	---	884	764	820
23	808	796	804	858	816	835	---	---	---	876	772	835
24	812	792	805	864	814	836	---	---	---	890	814	850
25	814	800	807	874	824	848	---	---	---	890	780	846
26	814	798	806	882	834	855	---	---	---	888	798	840
27	814	802	808	884	836	854	---	---	---	872	762	840
28	820	810	814	888	842	858	---	---	---	---	---	---
29	828	812	821	892	842	854	---	---	---	---	---	---
30	826	814	822	906	842	869	---	---	---	---	---	---
31	---	---	---	896	838	868	---	---	---	---	---	---
MONTH	828	695	785	906	776	831	---	---	---	---	---	---
YEAR	936	154	736									

SANTA CLARA RIVER BASIN

11113300 SANTA CLARA RIVER NEAR SANTA PAULA, CA

WATER-QUALITY RECORDS

LOCATION.--Lat 34°21'14", long 119°01'38", in SW¼NE¼SE¼ sec.12, T.3 N., R.21 W., Ventura County, Hydrologic Unit 18070102, 1.5 mi (2.4 km) upstream from Riverside Road bridge, and 1.8 mi (2.9 km) east of Santa Paula.

PERIOD OF RECORD.--Water years 1967 to current year.
CHEMICAL ANALYSES: Water years 1967 to current year.

COOPERATION.--Records were furnished by California Department of Water Resources.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
NOV 22...	1705	E180	1400	8.3	14.0	650	9.0	620	160	56	110
FEB 05...	1735	E250	1230	8.4	14.0	40	9.6	570	150	48	88
APR 24...	1515	E750	1120	8.4	20.5	30	8.6	530	130	48	85
MAY 11...	1725	E250	--	--	21.0	--	--	--	--	--	--
JUL 23...	1120	200	1420	8.0	--	4	8.7	670	170	62	120

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)
NOV 22...	27	1.9	6.0	210	550	50	1.0	1130	1.6	7.2
FEB 05...	25	1.6	5.0	210	480	35	.9	1050	2.9	13
APR 24...	26	1.6	4.0	200	440	36	.9	927	2.3	10
MAY 11...	--	--	--	--	--	--	--	--	--	--
JUL 23...	28	2.0	4.0	230	590	50	.9	1260	3.2	14

DATE	TIME	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	ZINC, DISSOLVED (UG/L AS ZN)
NOV 22...	1705	--	800	--	--	--	--	--	--
FEB 05...	1735	--	600	--	--	--	--	--	--
APR 24...	1515	--	600	--	--	--	--	--	--
MAY 11...	1725	0	--	0	10	0	0	.0	0
JUL 23...	1120	--	800	--	--	--	--	--	--

E Estimated

11113500 SANTA PAULA CREEK NEAR SANTA PAULA, CA

LOCATION.-- Lat 34°23'44", long 119°04'32", in NW¼SW¼SW¼ sec.27, T.4 N., R.21 W., Ventura County, Hydrologic Unit 18070102, on right bank upstream from Santa Paula Water Works diversion dam, 200 ft (60 m) upstream from Mud Creek, and 3 mi (5 km) north of Santa Paula.

DRAINAGE AREA.-- 40.0 mi^2 (103.6 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.-- October 1927 to current year. March 1912 to September 1913, at site 2.5 mi (4.0 km) upstream; records not equivalent.

GAGE.--Water-stage recorder and concrete diversion dam control. Datum of gage is 619.43 ft (188.802 m) Corps of Engineers datum. Oct. 1, 1927, to Feb. 19, 1931, at site 500 ft (150 m) downstream at different datum. Feb. 20, 1931, to Dec. 5, 1963, and July 30, 1965, to March 7, 1973 at site 50 ft (15 m) downstream. Feb. 20, 1931 to May 5, 1969 at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records poor. No gage-height record Oct. 1 to Dec. 20, Jan. 18-23, June 29 to July 5. No stage-discharge relation May 16 to June 28. No regulation above station. Diversion above station for irrigation of 60 acres (243,000 m^2) by Santa Paula Water Works began prior to October 1927; 195 acre-ft (240,000 m^3) was diverted during current year.

COOPERATION.--Records of diversion were furnished by Santa Paula Water Works.

AVERAGE DISCHARGE.--52 years, 23.0 ft^3/s (0.651 m^3/s), 16,660 acre-ft/yr (20.5 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,000 ft^3/s (595 m^3/s) Feb. 25, 1969, gage height, 18.18 ft (5.541 m), from floodmark, present datum, from rating curve extended above 2,300 ft^3/s (65.1 m^3/s) on basis of critical-depth measurement at gage height 15.2 ft (4.63 m); no flow at times in 1949, 1951-52, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft^3/s (5.66 m^3/s) and maximum (*), from rating curve extended above 2,000 ft^3/s (56.6 m^3/s) on basis of high-water compilation curve:

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 15	0745	*3,680	104	8.65	2.637	Feb. 21	0245	385	10.9	7.05	2.149
Jan. 31	2045	218	6.17	6.47	1.972	Mar. 27	0730	2,710	76.7	8.45	2.576
Feb. 14	0230	644	18.2	7.43	2.265						

Minimum daily discharge, 4.3 ft^3/s (0.12 m^3/s) Sept. 15, 16, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	7.2	7.9	14	70	61	160	35	16	9.6	5.1	5.7
2	7.2	7.2	7.9	13	55	51	139	32	16	9.5	5.3	6.0
3	7.2	7.2	7.9	13	40	48	118	29	16	9.4	5.5	6.3
4	7.2	7.2	7.9	13	33	46	91	29	15	9.2	5.3	6.1
5	7.2	7.2	7.9	39	31	42	82	28	15	8.9	5.2	5.8
6	7.2	7.2	7.9	34	33	40	79	28	15	8.9	5.4	6.1
7	7.2	7.2	7.9	21	39	42	73	27	15	8.9	5.4	5.6
8	7.2	7.2	7.9	18	45	43	68	25	14	10	5.6	5.1
9	7.2	7.2	7.9	18	46	42	64	25	14	9.7	5.9	5.1
10	7.2	7.2	7.9	18	44	39	60	24	14	9.2	5.9	4.8
11	7.2	7.2	7.9	18	41	36	58	23	14	9.2	5.9	4.7
12	7.2	7.2	7.9	21	39	36	52	23	13	8.9	6.6	4.7
13	7.2	7.2	7.9	19	36	37	53	22	13	8.6	6.9	4.4
14	7.2	7.2	7.9	19	226	35	50	22	13	8.2	7.2	4.5
15	7.2	7.2	7.9	455	83	36	49	21	13	8.2	7.3	4.3
16	7.2	7.2	7.9	143	61	42	50	20	12	7.9	7.0	4.3
17	7.2	7.2	8.9	61	57	52	49	20	12	7.0	7.0	4.9
18	7.2	7.2	23	36	51	38	46	20	12	7.0	7.2	4.7
19	7.2	7.2	19	30	48	43	43	19	12	6.7	7.2	4.6
20	7.2	7.2	17	28	50	39	42	19	12	6.7	7.2	4.5
21	7.2	9.5	16	27	168	39	42	19	12	7.3	7.2	5.3
22	7.2	15	16	26	81	38	41	18	11	7.3	6.9	4.8
23	7.2	13	15	25	91	38	40	18	11	6.7	6.7	4.6
24	7.2	11	15	24	68	36	39	18	11	5.8	6.1	4.7
25	7.2	9.8	15	24	66	36	37	18	11	5.8	5.7	5.0
26	7.2	9.2	14	23	62	37	37	18	11	5.4	5.4	4.3
27	7.2	8.6	14	23	58	504	36	17	10	5.7	5.1	4.6
28	7.2	8.3	14	23	55	546	35	17	10	6.0	5.6	4.6
29	7.2	8.0	14	23	---	314	34	17	10	6.0	6.1	5.6
30	7.2	7.9	14	33	---	253	34	17	9.8	5.7	6.2	5.6
31	7.2	---	13	102	---	195	---	16	---	5.2	5.8	---
TOTAL	223.2	244.3	354.3	1384	1777	2884	1801	684	382.8	238.6	190.9	151.3
MEAN	7.20	8.14	11.4	44.6	63.5	93.0	60.0	22.1	12.8	7.70	6.16	5.04
MAX	7.2	15	23	455	226	546	160	35	16	10	7.3	6.3
MIN	7.2	7.2	7.9	13	31	35	34	16	9.8	5.2	5.1	4.3
AC-FT	443	485	703	2750	3520	5720	3570	1360	759	473	379	300

CAL YR 1978 TOTAL 44166.2 MEAN 121 MAX 6300 MIN 7.2 AC-FT 87610
WTR YR 1979 TOTAL 10315.4 MEAN 28.3 MAX 546 MIN 4.3 AC-FT 20460

11113500 SANTA PAULA CREEK NEAR SANTA PAULA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to current year.
CHEMICAL ANALYSES: Water years 1967 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1969 to current year.
WATER TEMPERATURES: April 1969 to September 1970.

INSTRUMENTATION.--Specific-conductance recorder since April 1969. Water temperature recorder April 1969 to September 1970.

REMARKS.--Missing specific-conductance data due to equipment malfunction or flood damage.

COOPERATION.--Chemical-quality data was furnished by California Department of Water Resources.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,450 micromhos Feb. 7, 1976; minimum recorded, 191 micromhos Mar. 8, 1975.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,380 micromhos Dec. 5; minimum recorded, 242 micromhos Feb. 14.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
NOV 27...	1025	8.6	710	8.8	12.0	0	12.5	320	220	25	602
FEB 05...	1640	29	770	8.7	13.0	90	10.6	360	260	20	606
APR 24...	1345	41	580	8.6	19.5	1	9.1	290	190	12	517
MAY 11...	1820	22	--	--	18.5	--	--	--	--	--	--
JUL 23...	0955	7.6	620	8.2	27.0	2	8.7	290	200	21	537
AUG 01...	1230	--	1480	7.8	--	--	--	--	--	--	1110

DATE	TIME	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	ZINC, DISSOLVED (UG/L AS ZN)
MAY 11...	1820	0	0	10	10	0	.0	0

11113500 SANTA PAULA CREEK NEAR SANTA PAULA, CA--continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1				---	---	---	1290	1250	1270	763	707	748
2				---	---	---	1300	1200	1270	770	722	755
3				---	---	---	1360	1290	1320	---	---	---
4				---	---	---	1350	1120	1240	---	---	---
5				---	---	---	1380	1160	1250	---	---	---
6				---	---	---	1360	1140	1260	759	581	715
7				---	---	---	---	---	---	744	702	722
8				---	---	---	---	---	---	737	707	728
9				---	---	---	---	---	---	---	---	---
10				---	---	---	---	---	---	748	706	733
11				---	---	---	---	---	---	749	709	734
12				---	---	---	---	---	---	734	616	656
13				---	---	---	---	---	---	693	651	669
14				---	---	---	---	---	---	746	658	709
15				---	---	---	---	---	---	722	428	575
16				---	---	---	---	---	---	---	---	---
17				---	---	---	---	---	---	---	---	---
18				---	---	---	---	---	---	742	654	690
19				---	---	---	817	635	730	734	710	725
20				---	---	---	794	510	657	746	734	739
21				---	---	---	---	---	---	756	746	750
22				---	---	---	---	---	---	760	756	758
23				---	---	---	---	---	---	780	760	765
24				---	---	---	745	701	731	772	766	768
25				---	---	---	742	698	728	778	772	774
26				---	---	---	740	700	728	786	778	781
27				---	---	---	741	695	727	796	784	789
28				---	---	---	---	---	---	798	790	794
29				---	---	---	---	---	---	---	---	---
30				1280	1250	1270	750	696	735	872	566	786
31				---	---	---	758	706	744	898	572	726
MONTH				---	---	---	---	---	---	---	---	---

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	840	654	776							---	---	---
2	868	766	838							---	---	---
3	868	854	861							696	676	688
4	870	848	862							698	680	691
5	856	818	845							704	690	697
6	840	738	805							706	690	701
7	742	650	721							710	688	702
8	662	614	650							710	690	702
9	634	604	624							710	688	702
10	620	608	615							---	---	---
11	622	610	616							696	668	689
12	622	612	616							700	660	687
13	672	570	626							700	658	685
14	372	242	305							700	652	683
15	---	---	---							702	648	684
16	---	---	---							704	642	682
17	---	---	---							706	646	687
18	---	---	---							708	646	686
19	---	---	---							712	646	690
20	---	---	---							712	674	698
21	---	---	---							712	652	694
22	---	---	---							714	632	685
23	---	---	---							714	628	683
24	---	---	---							716	632	684
25	---	---	---							720	638	695
26	---	---	---							720	630	686
27	---	---	---							718	668	702
28	---	---	---							722	672	702
29	---	---	---							732	644	694
30	---	---	---							734	606	684
31	---	---	---							706	616	671
MONTH	---	---	---							734	606	691

11113500 SANTA PAULA CREEK NEAR SANTA PAULA, CA--continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	704	608	672	---	---	---	922	884	903	798	778	790
2	700	606	666	---	---	---	914	898	904	802	770	785
3	698	604	664	---	---	---	914	892	902	788	766	778
4	698	614	669	---	---	---	910	870	892	802	768	786
5	698	606	667	---	---	---	902	868	887	806	768	786
6	702	654	687	---	---	---	894	864	882	798	764	781
7	---	---	---	---	---	---	894	860	877	792	762	777
8	---	---	---	---	---	---	886	846	873	788	742	764
9	---	---	---	---	---	---	886	868	876	770	732	754
10	---	---	---	---	---	---	886	868	876	772	726	749
11	---	---	---	---	---	---	884	842	869	750	726	738
12	---	---	---	---	---	---	884	860	871	754	724	743
13	---	---	---	---	---	---	878	854	868	758	708	744
14	---	---	---	---	---	---	880	862	870	760	726	747
15	---	---	---	---	---	---	882	860	870	764	740	755
16	---	---	---	---	---	---	876	848	862	772	712	754
17	---	---	---	---	---	---	870	846	858	772	750	761
18	---	---	---	---	---	---	868	850	858	790	766	777
19	---	---	---	---	---	---	858	842	851	802	776	791
20	---	---	---	---	---	---	860	838	851	810	784	796
21	---	---	---	---	---	---	862	840	849	820	786	805
22	---	---	---	---	---	---	858	824	839	820	786	804
23	---	---	---	---	---	---	844	806	829	816	794	807
24	---	---	---	---	---	---	840	818	829	830	810	816
25	---	---	---	---	---	---	840	814	828	830	812	822
26	---	---	---	912	838	880	836	794	814	840	808	822
27	---	---	---	924	892	911	814	780	796	836	812	824
28	---	---	---	926	896	913	802	748	785	834	814	829
29	---	---	---	932	902	917	810	792,	800	848	824	836
30	---	---	---	928	894	914	818	784	806	852	840	840
31	---	---	---	928	880	908	812	766	791	---	---	---
MONTH	---	---	---	---	---	---	922	748	854	852	708	785
YEAR	1380	242	785									

11113900 SATICOY DIVERSION NEAR SATICOY, CA

LOCATION.--Lat 34°17'35", long 119°06'00", in Santa Paula Y Saticoy Grant, Ventura County, Hydrologic Unit 18070102, on diversion works at Santa Clara River, 1.9 mi (3.1 km) east of Saticoy.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1969 to current year. October 1928 to April 1969 in files of United Water Conservation District.

GAGE.--Water-stage recorder. Altitude of gage is 160 ft (49 m), from topographic map.

REMARKS.--Water is diverted from left bank of Santa Clara River to percolation basin near Los Angeles Avenue (State Highway 118) and for irrigation in Pleasant Valley. Imported water from the California Water Project released to the basin at Castaic Dam and Pyramid Dam since 1972.

COOPERATION.--Records were furnished by United Water Conservation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 437 ft³/s (12.4 m³/s) Dec. 10, 1978; no flow at times in most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	184	244	170	0	288	0	289	182	84	144	218
2	114	175	245	140	0	335	0	298	184	85	148	224
3	113	184	226	142	0	354	0	274	190	92	154	236
4	117	181	228	145	207	348	0	265	191	92	156	240
5	118	179	243	267	289	346	0	260	181	94	162	222
6	126	178	240	0	353	334	0	266	177	90	163	222
7	132	180	229	0	379	332	0	273	202	88	163	219
8	133	190	229	0	374	318	0	294	202	87	158	219
9	133	194	410	0	355	321	0	308	197	88	172	223
10	122	244	437	0	329	296	0	256	188	88	169	219
11	129	360	387	200	329	254	0	243	179	94	174	208
12	132	320	266	274	310	242	0	253	175	83	182	208
13	131	342	248	254	312	289	0	288	172	83	186	203
14	127	195	267	209	182	288	0	289	178	87	180	198
15	132	167	212	164	72	270	0	279	176	95	195	204
16	143	273	207	0	59	321	0	289	176	98	194	202
17	121	309	202	0	0	0	0	280	185	96	195	206
18	88	219	0	0	0	290	0	277	172	108	202	198
19	95	222	0	0	0	275	0	278	164	117	218	196
20	158	218	0	0	0	272	0	289	162	117	223	197
21	174	184	0	0	0	251	0	289	162	116	218	196
22	178	182	200	138	0	287	0	280	156	118	210	194
23	176	167	196	296	0	289	0	266	142	121	206	196
24	170	88	196	279	0	173	0	260	147	85	207	209
25	168	74	198	264	0	232	0	250	142	78	221	209
26	170	68	187	245	0	232	0	235	129	116	230	202
27	180	72	190	237	114	77	0	212	123	135	224	190
28	175	126	200	240	314	0	0	209	85	144	223	191
29	175	212	156	224	---	0	0	200	80	145	231	197
30	190	232	155	175	---	0	125	193	82	145	231	214
31	184	---	149	0	---	0	---	188	---	144	224	---
TOTAL	4417	5919	6347	4063	3978	7314	125	8130	4881	3213	5963	6260
MEAN	142	197	205	131	142	236	4.17	262	163	104	192	209
MAX	190	360	437	296	379	354	125	308	202	145	231	240
MIN	88	68	0	0	0	0	0	188	80	78	144	190
AC-FT	8760	11740	12590	8060	7890	14510	248	16130	9680	6370	11830	12420

CAL YR 1978 TOTAL 55498.60 MEAN 152 MAX 437 MIN 0 AC-FT 110100
WTR YR 1979 TOTAL 60610.00 MEAN 166 MAX 437 MIN 0 AC-FT 120200

11113900 SATICOY DIVERSION NEAR SATICOY, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to current year.
SPECIFIC CONDUCTANCE: Water years 1969 to current year.
WATER TEMPERATURES: Water years 1969 to 1970.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1969 to current year.
WATER TEMPERATURES: April 1969 to September 1970.

INSTRUMENTATION.--Specific-conductance recorder since April 1969.

REMARKS.--Interruptions in record were due to malfunctions of the instrument and periods of no flow.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 2,320 micromhos Oct. 21, 1972; minimum recorded, 517 micromhos Jan. 11, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,550 micromhos Sept. 6; minimum recorded, 845 micromhos Nov. 16.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1230	1200	1220	---	---	---	---	---	---	1460	1440	1450
2	1240	1210	1230	1330	1290	1320	---	---	---	1470	1450	1460
3	1240	1210	1230	1340	1320	1330	---	---	---	1500	1450	1460
4	1220	1200	1210	1330	1310	1320	---	---	---	1460	1450	1450
5	1210	1190	1200	1330	1280	1320	---	---	---	---	---	---
6	---	---	---	1340	1290	1320	---	---	---	---	---	---
7	---	---	---	1340	1310	1330	---	---	---	---	---	---
8	---	---	---	1340	1280	1320	---	---	---	---	---	---
9	---	---	---	1330	1280	1310	---	---	---	---	---	---
10	---	---	---	1330	1270	1300	---	---	---	---	---	---
11	---	---	---	1310	1080	1230	---	---	---	---	---	---
12	---	---	---	1290	1010	1170	---	---	---	1340	1260	1310
13	---	---	---	1040	940	990	---	---	---	1280	1240	1260
14	---	---	---	1030	875	948	---	---	---	1290	1210	1260
15	---	---	---	1220	855	990	---	---	---	---	---	---
16	---	---	---	1020	845	914	---	---	---	---	---	---
17	---	---	---	1380	985	1140	---	---	---	---	---	---
18	---	---	---	1380	1350	1360	---	---	---	---	---	---
19	---	---	---	1370	1350	1360	---	---	---	---	---	---
20	---	---	---	1360	1340	1350	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	1400	1390	1390	1260	1210	1240
24	---	---	---	---	---	---	1400	1390	1390	1240	1220	1230
25	---	---	---	---	---	---	1400	1390	1390	1270	1240	1250
26	---	---	---	---	---	---	1410	1400	1400	1280	1250	1270
27	---	---	---	---	---	---	1420	1400	1410	1300	1270	1290
28	---	---	---	---	---	---	1430	1410	1420	1320	1290	1300
29	---	---	---	---	---	---	1430	1430	1430	1320	1310	1320
30	---	---	---	---	---	---	1450	1430	1440	---	---	---
31	---	---	---	---	---	---	1450	1430	1440	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

11113900 SATICOY DIVERSION NEAR SATICOY, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	1240	1070	1140				1220	1200	1200
2	---	---	---	1220	1140	1160				1230	1200	1210
3	---	---	---	1180	1150	1170				1230	1200	1210
4	---	---	---	1190	1160	1170				1250	1200	1230
5	1190	1110	1130	1190	1160	1170				1250	1210	1230
6	---	---	---	1180	1150	1160				1250	1230	1240
7	---	---	---	1170	1130	1150				1260	1240	1250
8	1080	1020	1040	1160	1110	1140				1250	1230	1230
9	1050	1020	1030	1200	1110	1140				1250	1200	1220
10	1060	1030	1040	1140	1120	1130				1270	1220	1250
11	1070	1050	1060	1160	1130	1140				1320	1240	1260
12	---	---	---	1170	1130	1150				1280	1230	1250
13	---	---	---	1190	1140	1160				1240	1210	1220
14	---	---	---	1160	1140	1150				1230	1210	1220
15	---	---	---	1200	1140	1170				1230	1210	1220
16	---	---	---	1200	1160	1180				1240	1210	1220
17	---	---	---	---	---	---				1230	1210	1220
18	---	---	---	1160	1130	1150				1230	1210	1220
19	---	---	---	1200	1050	1150				1220	1210	1210
20	---	---	---	1180	1110	1130				1220	1200	1210
21	---	---	---	1150	1120	1140				1230	1200	1220
22	---	---	---	1160	1140	1150				1250	1210	1220
23	---	---	---	1170	1150	1160				1260	1230	1240
24	---	---	---	1190	1150	1170				1260	1240	1240
25	---	---	---	1200	1170	1180				1260	1240	1240
26	---	---	---	1190	1160	1180				1280	1240	1250
27	---	---	---	---	---	---				1300	1280	1290
28	---	---	---	---	---	---				1330	1290	1300
29	---	---	---	---	---	---				1330	1300	1320
30	---	---	---	---	---	---				1350	1320	1330
31	---	---	---	---	---	---				1340	1320	1330
MONTH	---	---	---	1240	1050	1160				1350	1200	1240

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1350	1330	1340	1450	1370	1410	1420	1380	1400	1490	1470	1470
2	1350	1330	1340	1450	1370	1410	1420	1380	1400	1500	1480	1480
3	1350	1330	1340	1460	1390	1420	1420	1360	1390	1510	1490	1490
4	1350	1330	1340	1450	1400	1420	1410	1370	1390	1520	1500	1500
5	1360	1330	1350	1440	1390	1410	1410	1380	1390	1520	1500	1510
6	1380	1330	1340	1440	1390	1420	1420	1390	1400	1550	1500	1520
7	1350	1290	1320	1450	1400	1420	1430	1340	1400	---	---	---
8	1330	1300	1320	1440	1400	1420	1410	1380	1400	---	---	---
9	1340	1290	1310	1470	1420	1440	1400	1330	1380	---	---	---
10	1340	1300	1320	1480	1420	1440	1400	1350	1380	---	---	---
11	1340	1310	1330	1460	1400	1430	1400	1370	1380	---	---	---
12	1350	1310	1330	1480	1430	1460	1390	1370	1380	---	---	---
13	1360	1330	1340	1500	1450	1470	1410	1380	1380	---	---	---
14	1370	1330	1350	1490	1440	1460	1430	1380	1400	---	---	---
15	1370	1320	1340	1470	1430	1450	1420	1370	1390	---	---	---
16	1360	1320	1340	1480	1430	1450	1400	1350	1370	1380	1350	1360
17	1350	1320	1330	1480	1430	1450	1400	1330	1380	1420	1350	1390
18	1350	1320	1330	1480	1420	1440	1410	1380	1390	1430	1360	1410
19	1350	1300	1320	1460	1410	1430	1410	1380	1390	1410	1370	1390
20	1350	1300	1320	1440	1400	1410	1410	1390	1400	1380	1350	1360
21	1340	1300	1320	1430	1390	1410	1410	1380	1400	1370	1330	1350
22	1340	1300	1320	1420	1370	1400	1430	1390	1400	1380	1310	1350
23	1340	1290	1310	1420	1370	1400	1430	1400	1410	1380	1350	1360
24	1470	1290	1300	1550	1410	1480	1450	1410	1420	1420	1370	1390
25	1310	1280	1300	1550	1430	1490	1460	1410	1430	1420	1370	1400
26	1320	1280	1300	1470	1390	1430	1440	1330	1390	1420	1380	1410
27	1400	1310	1330	1430	1380	1400	1450	1420	1430	1440	1390	1420
28	1430	1330	1380	1430	1380	1400	1450	1420	1430	1440	1390	1420
29	1430	1350	1390	1410	1380	1390	1460	1370	1420	1440	1410	1420
30	1440	1380	1410	1420	1380	1400	1470	1440	1450	1520	1430	1460
31	---	---	---	1430	1380	1400	1480	1450	1460	---	---	---
MONTH	1470	1280	1330	1550	1370	1430	1480	1330	1400	---	---	---
YEAR	1550	845	1320									

11114000 SANTA CLARA RIVER AT MONTALVO, CA

LOCATION.--Lat 34°14'31", long 119°11'21", in San Miguel Grant, Ventura County, Hydrologic Unit 18070102, on downstream end of center pier of southbound bridge on U.S. Highway 101, 0.9 mi (1.4 km) southeast of Montalvo, and 4.5 mi (7.2 km) upstream from mouth.

DRAINAGE AREA.--1,612 mi^2 (4,175 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to September 1932, October 1949 to current year. Monthly discharge only for 1950-67, published in WRD 1968 report. October 1949 to September 1969, published as "at Saticoy."

GAGE.--Water-stage recorder. Datum of gage is 51.88 ft (15.813 m) National Geodetic Vertical Datum of 1929 (levels by Ventura County Flood Control District). Oct. 1, 1927, to Sept. 30, 1932, and Oct. 1, 1949, to Sept. 30, 1967, at same site at different datums. Oct. 1, 1967, to Feb. 2, 1970, at site 3.9 mi (6.3 km) upstream at different datum.

REMARKS.--Records fair. Flow partly regulated by Lake Piru (station 11109500) 33 mi (53 km) upstream since May 1955; by Pyramid Lake, capacity, 173,500 acre-ft (214 hm^3) 42 mi (68 km) upstream since December 1971; and by Castaic Reservoir, capacity, 324,000 acre-ft (399 hm^3) 43 mi (69 km) upstream since January 1972. Natural flow affected by ground-water withdrawals, diversions, municipal use, and ground-water replenishment. Imported water from the California Water Project released to the basin at Castaic Dam and Pyramid Dam. Diversion to spreading grounds and for irrigation in Pleasant Valley, at site 6.0 mi (9.7 km) upstream (station 11113900). AVERAGE DISCHARGE represents flow to the ocean regardless of upstream development.

COOPERATION.--Seven discharge measurements were furnished by Ventura County Flood Control District.

AVERAGE DISCHARGE.--35 years, 136 ft^3/s (3.852 m^3/s), 98,530 acre-ft/yr (121 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 165,000 ft^3/s (4,670 m^3/s) Jan. 25, 1969, gage height, 17.41 ft (5.307 m), present datum; no flow for long periods in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 2, 1938, 120,000 ft^3/s (3,400 m^3/s), estimated by Ventura County Flood Control District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,600 ft^3/s (527 m^3/s) Mar. 27, gage height, 6.37 ft (1.942 m); minimum daily, 0.02 ft^3/s (0.001 m^3/s) Sept. 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	.93	.22	.36	1040	450	2100	59	7.5	1.4	.25	.03
2	.42	.83	.15	.36	624	273	1950	3.2	7.1	1.7	.29	.03
3	.49	.73	.10	.54	578	181	1850	1.3	6.0	2.4	.29	.03
4	.36	.49	.08	.63	253	138	1760	1.5	6.4	2.6	.25	.03
5	.56	.31	.08	538	121	117	1700	.94	6.7	2.0	.21	.03
6	.93	.42	.12	1320	80	94	1640	.94	7.9	2.2	.21	.04
7	.49	.56	.10	366	110	94	1570	1.1	7.1	2.0	.21	.04
8	.31	.64	.10	279	150	142	1500	1.8	6.0	1.8	.21	.05
9	.42	.83	.08	308	166	161	1440	2.2	5.3	1.8	.17	.05
10	.42	1.3	.05	301	156	138	1390	2.4	5.0	1.3	.17	.04
11	.64	1.3	.05	165	147	192	1150	2.6	3.4	1.3	.17	.04
12	.83	.83	.04	3.1	147	198	1010	2.4	3.4	1.3	.17	.04
13	.93	.83	.10	.36	147	165	757	2.4	4.4	1.4	.17	.03
14	.42	.73	.26	35	1990	138	757	1.8	3.4	1.4	.17	.03
15	.42	.83	.36	2440	1030	204	782	2.6	5.5	1.4	.14	.04
16	.73	.64	.08	3580	697	217	808	3.0	4.7	1.2	.11	.03
17	.83	.49	13	1340	555	798	697	3.2	5.0	1.1	.14	.02
18	1.0	.42	518	696	482	450	621	3.4	4.7	.94	.11	.02
19	.93	.31	649	600	443	567	611	3.7	4.7	.84	.09	.03
20	1.0	.31	283	513	182	324	574	3.9	5.0	.94	.07	.05
21	.73	7.4	221	443	1860	308	556	3.4	4.2	1.2	.07	.09
22	.49	55	144	305	683	246	530	3.7	4.2	.94	.05	.11
23	.49	97	8.7	14	848	209	505	3.9	3.7	.75	.05	.09
24	.83	.83	4.9	6.8	684	187	450	3.9	3.7	.75	.05	.07
25	1.2	.36	4.0	4.5	555	209	359	4.7	3.2	.57	.05	.11
26	1.0	.22	2.6	4.0	523	192	345	5.7	2.6	.39	.05	.14
27	.73	.15	2.2	3.1	430	8430	269	5.7	2.4	.34	.04	.14
28	.64	.22	1.6	1.6	223	6190	303	7.1	2.6	.29	.05	.17
29	.42	.31	1.0	.81	---	3280	303	7.1	3.0	.21	.05	.31
30	.56	.22	.90	170	---	2500	182	6.0	2.4	.25	.03	.14
31	.73	---	.72	1380	---	2300	---	6.7	---	.29	.03	---
TOTAL	20.31	175.44	1856.59	14819.16	14904	29092	28469	161.28	141.2	37.00	4.12	2.07
MEAN	.66	5.85	59.9	478	532	938	949	5.20	4.71	1.19	.13	.069
MAX	1.2	97	649	3580	1990	8430	2100	59	7.9	2.6	.29	.31
MIN	.31	.15	.04	.36	80	94	182	.94	2.4	.21	.03	.02
AC-FT	40	348	3680	29390	29560	57700	56470	320	280	73	8.2	4.1

CAL YR 1978 TOTAL 336108.25 MEAN 921 MAX 60700 MIN .04 AC-FT 666700
WTR YR 1979 TOTAL 89682.17 MEAN 246 MAX 8430 MIN .02 AC-FT 177900

11114000 SANTA CLARA RIVER AT MONTALVO, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--Prior to October 1969, published as "at Saticoy" (station 11113920).
WATER TEMPERATURES: October 1967 to September 1969, October 1970 to current year.
SEDIMENT RECORDS: October 1967 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 108,000 mg/L Mar. 4, 1978; minimum daily mean, no flow for many days most years.
SEDIMENT DISCHARGE: Maximum daily, 20,400,000 tons (18,500,000 metric tons) Feb. 25, 1969; minimum daily, 0 tons on many days each year.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 32,500 mg/L Mar. 27; minimum daily mean, 9 mg/L Sept. 10, 21.
SEDIMENT DISCHARGE: Maximum daily, 889,000 tons (806,000 metric tons) Mar. 27; minimum daily, 0 tons many days in September.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	---	---	8.0	12.0	---	16.0	25.0	---	---	---
2		---	---	---	8.0	9.0	---	---	---	29.0	---	---
3		---	---	---	7.0	16.0	13.0	---	---	---	29.0	---
4		---	---	---	14.0	---	---	24.0	18.0	---	---	27.0
5		---	---	9.0	---	---	---	---	---	---	---	---
6		---	---	8.0	10.0	---	13.0	---	---	23.0	23.0	---
7		---	---	---	---	---	---	22.5	21.0	---	---	24.0
8		---	---	---	16.0	---	---	15.0	19.0	---	---	---
9		---	---	10.0	---	14.0	16.0	---	---	---	---	---
10		---	---	---	---	---	---	---	---	---	21.0	27.0
11		---	---	11.5	---	---	---	15.0	30.0	25.0	---	---
12		---	16.0	10.5	---	14.0	16.0	---	---	---	---	---
13		12.0	---	---	16.0	---	---	---	---	---	---	---
14		20.0	---	10.5	11.0	---	---	15.5	---	---	---	23.0
15		---	---	11.5	9.0	16.0	---	---	29.0	---	---	---
16		---	---	9.0	10.0	17.0	16.0	---	---	28.0	---	---
17		---	12.5	14.0	10.0	12.0	---	---	---	---	21.0	28.0
18		---	11.5	10.5	---	16.0	---	16.0	---	---	---	---
19		---	10.5	15.0	12.0	12.0	---	---	21.0	25.0	---	---
20		---	8.0	13.0	11.0	11.0	15.0	---	---	---	25.0	---
21		---	---	---	11.0	12.0	---	25.0	---	---	---	26.0
22		17.0	---	---	9.0	13.0	---	20.5	---	22.0	---	---
23		13.0	---	---	10.5	12.5	18.0	---	---	---	---	---
24		12.0	13.0	14.5	9.0	---	---	---	---	---	27.0	24.5
25		---	---	---	---	---	---	18.0	26.0	20.0	---	---
26		---	---	---	---	15.0	---	---	---	---	---	---
27		---	17.0	---	11.5	13.0	17.0	---	---	28.0	22.0	---
28		---	---	---	---	11.0	---	15.0	---	---	---	21.0
29		---	---	13.0	---	11.0	---	---	30.0	---	---	21.0
30		---	---	9.0	---	13.0	---	---	---	21.0	---	---
31		---	---	8.0	---	13.0	---	---	---	---	27.0	---
MONTH		---	---	---	---	---	---	---	---	---	---	---

11114000 SANTA CLARA RIVER AT MONTALVO, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.36	11	.01	.93	50	.13	.22	124	.07
2	.42	30	.03	.83	50	.11	.15	121	.05
3	.49	50	.07	.73	50	.10	.10	119	.03
4	.36	50	.05	.49	50	.07	.08	117	.03
5	.56	50	.08	.31	50	.04	.08	114	.02
6	.93	50	.13	.42	50	.06	.12	112	.04
7	.49	50	.07	.56	50	.08	.10	110	.03
8	.31	50	.04	.64	50	.09	.10	107	.03
9	.42	50	.06	.83	50	.11	.08	105	.02
10	.42	50	.06	1.3	50	.18	.05	103	.01
11	.64	50	.09	1.3	50	.18	.05	100	.01
12	.83	50	.11	.83	50	.11	.04	98	.01
13	.93	50	.13	.83	1000	2.2	.10	340	.09
14	.42	50	.06	.73	1700	3.4	.26	590	.41
15	.42	50	.06	.83	1000	2.2	.36	830	.81
16	.73	50	.10	.64	500	.86	.08	1080	.23
17	.83	50	.11	.49	200	.26	13	1340	49
18	1.0	50	.14	.42	100	.11	518	2110	3170
19	.93	50	.13	.31	100	.08	649	2920	5540
20	1.0	50	.14	.31	100	.08	283	910	719
21	.73	50	.10	7.4	2380	71	221	650	388
22	.49	50	.07	55	8340	942	144	560	218
23	.49	50	.07	97	1040	568	8.7	470	11
24	.83	50	.11	.83	140	.31	4.9	380	5.0
25	1.2	50	.16	.36	138	.13	4.0	280	3.0
26	1.0	50	.14	.22	135	.08	2.6	180	1.3
27	.73	50	.10	.15	133	.05	2.2	75	.45
28	.64	50	.09	.22	131	.08	1.6	60	.26
29	.42	50	.06	.31	128	.11	1.0	50	.14
30	.56	50	.08	.22	126	.07	.90	50	.12
31	.73	50	.10	---	---	---	.72	50	.10
TOTAL	20.31	---	2.75	175.44	---	1592.28	1856.59	---	10107.26

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.36	50	.05	1040	6610	21100	450	1460	2170
2	.36	50	.05	624	4700	7920	273	850	627
3	.54	50	.07	578	6700	10500	181	500	244
4	.63	50	.09	253	1860	1890	138	400	149
5	538	3310	11600	121	400	131	117	220	69
6	1320	7380	39900	80	400	86	94	100	25
7	366	1700	1730	110	310	92	94	150	38
8	279	750	565	150	220	89	142	210	81
9	308	350	291	166	200	90	161	260	113
10	301	150	122	156	180	76	138	250	93
11	165	50	22	147	160	64	192	230	119
12	3.1	50	.42	147	145	58	198	210	112
13	.36	50	.05	147	262	136	165	209	98
14	35	339	86	1990	11500	74800	138	179	74
15	2440	12200	149000	1030	6490	18000	204	390	359
16	3580	14100	198000	697	4400	8280	217	492	511
17	1340	2540	10300	555	3790	5680	798	3250	7630
18	696	1320	2500	482	3100	4030	450	2240	2920
19	600	1030	1670	443	2410	2680	567	1940	3240
20	513	890	1230	182	2410	1510	324	680	595
21	443	820	981	1860	10600	58800	308	400	333
22	305	579	602	683	5380	10200	246	230	153
23	14	75	2.8	848	6160	14400	209	230	130
24	6.8	40	.73	684	4300	7940	187	220	111
25	4.5	50	.61	555	2950	4420	209	210	119
26	4.0	60	.65	523	1610	2270	192	200	104
27	3.1	70	.59	430	538	694	8430	32500	889000
28	1.6	80	.35	223	416	296	6190	26300	453000
29	.81	80	.17	---	---	---	3280	6300	55800
30	170	903	3220	---	---	---	2500	2000	13500
31	1380	7990	32000	---	---	---	2300	1400	8690
TOTAL	14819.16	---	453825.6	14904	---	257332	29092	---	1440207

11114000 SANTA CLARA RIVER AT MONTALVO, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2100	1450	8220	59	698	111	7.5	256	5.2
2	1950	1490	7840	3.2	620	5.4	7.1	240	4.6
3	1850	1540	7690	1.3	542	1.9	6.0	223	3.6
4	1760	1340	6370	1.5	460	1.9	6.4	207	3.6
5	1700	1140	5230	.94	364	.92	6.7	224	4.1
6	1640	944	4180	.94	269	.68	7.9	240	5.1
7	1570	1100	4660	1.1	173	.51	7.1	257	4.9
8	1500	1250	5060	1.8	168	.82	6.0	222	3.6
9	1440	1400	5440	2.2	164	.97	5.3	225	3.2
10	1390	1400	5250	2.4	159	1.0	5.0	227	3.1
11	1150	1400	4350	2.6	154	1.1	3.4	230	2.1
12	1010	1400	3820	2.4	155	1.0	3.4	231	2.1
13	757	1360	2780	2.4	157	1.0	4.4	232	2.8
14	757	1310	2680	1.8	158	.77	3.4	233	2.1
15	782	1270	2680	2.6	170	1.2	5.5	234	3.5
16	808	1220	2660	3.0	182	1.5	4.7	318	4.0
17	697	1180	2220	3.2	193	1.7	5.0	403	5.4
18	621	1140	1910	3.4	205	1.9	4.7	488	6.2
19	611	1090	1800	3.7	190	1.9	4.7	572	7.3
20	574	1050	1630	3.9	176	1.9	5.0	564	7.6
21	556	982	1470	3.4	161	1.5	4.2	556	6.3
22	530	914	1310	3.7	212	2.1	4.2	549	6.2
23	505	846	1150	3.9	231	2.4	3.7	541	5.4
24	450	803	976	3.9	249	2.6	3.7	533	5.3
25	359	760	737	4.7	268	3.4	3.2	525	4.5
26	345	717	668	5.7	258	4.0	2.6	444	3.1
27	269	674	490	5.7	248	3.8	2.4	364	2.4
28	303	680	556	7.1	239	4.6	2.6	283	2.0
29	303	686	561	7.1	229	4.4	3.0	202	1.6
30	182	692	340	6.0	238	3.9	2.4	214	1.4
31	---	---	---	6.7	247	4.5	---	---	---
TOTAL	28469	---	94728	161.28	---	176.27	141.2	---	122.3

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.4	225	.85	.25	71	.05	.03	62	.01
2	1.7	237	1.1	.29	72	.06	.03	49	0
3	2.4	224	1.5	.29	74	.06	.03	36	0
4	2.6	212	1.5	.25	75	.05	.03	24	0
5	2.0	199	1.1	.21	77	.04	.03	25	0
6	2.2	186	1.1	.21	78	.04	.04	27	0
7	2.0	172	.93	.21	67	.04	.04	28	0
8	1.8	159	.77	.21	56	.03	.05	22	0
9	1.8	145	.70	.17	46	.02	.05	15	0
10	1.3	132	.46	.17	35	.02	.04	9	0
11	1.3	118	.41	.17	34	.02	.04	15	0
12	1.3	117	.41	.17	32	.01	.04	21	0
13	1.4	116	.44	.17	31	.01	.03	27	0
14	1.4	115	.43	.17	30	.01	.03	33	0
15	1.4	114	.43	.14	29	.01	.04	34	0
16	1.2	113	.37	.11	27	.01	.03	34	0
17	1.1	115	.34	.14	26	.01	.02	35	0
18	.94	118	.30	.11	34	.01	.02	28	0
19	.84	120	.27	.09	42	.01	.03	22	0
20	.94	127	.32	.07	50	.01	.05	16	0
21	1.2	134	.43	.07	53	.01	.09	9	0
22	.94	141	.36	.05	56	.01	.11	15	0
23	.75	152	.31	.05	58	.01	.09	22	.01
24	.75	163	.33	.05	61	.01	.07	28	.01
25	.57	174	.27	.05	61	.01	.11	26	.01
26	.39	118	.12	.05	62	.01	.14	24	.01
27	.34	61	.06	.04	62	.01	.14	21	.01
28	.29	63	.05	.05	65	.01	.17	19	.01
29	.21	66	.04	.05	68	.01	.31	18	.02
30	.25	68	.05	.03	71	.01	.14	19	.01
31	.29	69	.05	.03	74	.01	---	---	---
TOTAL	37.00	---	15.80	4.12	---	.63	2.07	---	.10
YEAR	89682.17		2258110						

11114000 SANTA CLARA RIVER AT MONTALVO, CA--Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1978	20.31	2.75	0	3
NOVEMBER ...	175.44	1592.28	50	1640
DECEMBER ...	1856.59	10107.26	1260	11400
JANUARY 1979	14819.16	453825.63	62000	516000
FEBRUARY ...	14904.00	257332.00	31100	288000
MARCH	29092.00	1440207.00	154000	1590000
APRIL	28469.00	94728.00	106000	201000
MAY	161.28	176.27	21	197
JUNE	141.20	122.30	7	129
JULY	37.00	15.80	0	16
AUGUST	4.12	0.63	0	1
SEPTEMBER ..	2.07	0.10	0	0
TOTAL	89682.17	2258110.02	354438	2608386

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPER-ATURE, WATER (DEG C)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM
NOV										
22...	1215	17.0	1.3	1710	6.0	--	--	--	--	--
DEC										
12...	1130	16.0	.04	98	.01	--	--	--	--	--
19...	1110	10.5	684	3230	5970	--	36	48	57	62
JAN										
15...	1510	10.5	6200	27300	457000	--	34	49	65	--
17...	1330	14.0	1270	1600	5490	--	27	35	44	53
18...	1510	10.4	697	1340	2520	--	--	--	--	--
29...	1125	12.5	.81	93	.20	--	--	--	--	--
31...	1330	8.0	1130	5400	16500	--	50	67	83	94
FEB										
06...	1230	10.0	113	444	135	--	--	--	--	--
21...	1330	13.0	1410	7160	27300	--	25	31	41	51
APR										
09...	0900	13.0	1440	756	2940	27	33	43	55	70
MAY										
07...	1230	22.5	.57	173	.27	--	--	--	--	--
22...	0930	20.5	4.2	212	2.4	--	--	--	--	--
JUN										
07...	1000	21.0	7.4	257	5.1	--	--	--	--	--
JUL										
25...	0850	20.0	.71	174	.33	--	--	--	--	--

11114000 SANTA CLARA RIVER AT MONTALVO, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
NOV									
22...	--	100	--	--	--	--	--	--	--
DEC									
12...	--	38	--	--	--	--	--	--	--
19...	--	65	--	68	--	89	--	100	--
JAN									
15...	--	88	--	92	--	96	--	99	100
17...	--	63	--	74	--	91	--	98	100
18...	--	64	--	--	--	--	--	--	--
29...	--	49	--	--	--	--	--	--	--
31...	--	95	--	100	--	--	--	--	--
FEB									
[illegible]6...	--	44	--	--	--	--	--	--	--
21...	--	61	--	72	--	85	--	96	100
APR									
09...	83	--	90	--	97	--	100	--	--
MAY									
07...	--	39	--	--	--	--	--	--	--
22...	--	84	--	--	--	--	--	--	--
JUN									
07...	--	88	--	--	--	--	--	--	--
JUL									
25...	--	48	--	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	NUMBER OF SAM-PLING POINTS	STREAM-FLOW, INSTAN-TANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
AUG							
22...	1030	1	.05	2	5	12	19
22...	1035	1	.05	1	3	14	36
22...	1040	1	.05	1	3	11	20
22...	1045	1	.05	3	9	42	78
22...	1050	1	.05	4	8	12	15
22...	1055	1	.05	21	58	86	96
22...	1100	1	.05	1	4	22	78
22...	1105	1	.05	3	7	16	27
22...	1110	1	.05	1	2	16	84
22...	1115	1	.05	2	5	9	15
22...	1120	1	.05	3	11	45	69
22...	1125	1	.05	2	4	17	42
22...	1130	1	.05	3	8	28	64
22...	1135	1	.05	0	3	14	40
22...	1140	1	.05	0	4	18	52
22...	1145	1	.05	5	15	40	69
22...	1150	1	.05	4	15	39	68
22...	1155	1	.05	14	26	46	78
22...	1200	1	.05	2	4	18	57

11114000 SANTA CLARA RIVER AT MONTALVO, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
AUG							
22...	23	26	31	39	59	100	--
22...	51	62	72	84	97	100	--
22...	28	29	34	42	57	100	--
22...	86	90	93	96	100	--	--
22...	17	18	20	23	30	45	100
22...	99	100	--	--	--	--	--
22...	95	98	100	--	--	--	--
22...	35	41	47	56	73	100	--
22...	97	98	99	100	--	--	--
22...	17	18	19	21	25	43	100
22...	82	87	91	94	96	100	--
22...	53	64	77	91	98	100	--
22...	80	86	91	96	100	--	--
22...	61	72	78	84	93	100	--
22...	75	84	90	95	98	100	--
22...	85	92	96	98	100	--	--
22...	88	93	97	100	--	--	--
22...	94	98	99	100	--	--	--
22...	84	93	96	98	98	100	--

11115000 MATILIJA RESERVOIR AT MATILIJA HOT SPRINGS, CA

LOCATION.--Lat 34°29'08", long 119°18'25", in NE¼NW¼SE¼ sec.29, T.5 N., R.23 W., Ventura County, Hydrologic Unit 18070101, on left end of dam on Ventura River, 0.2 mi (0.3 km) east of Matilija Hot Springs, and 1.8 mi (2.9 km) southwest of Wheeler Springs.

DRAINAGE AREA.--54.4 mi^2 (140.9 km^2).

PERIOD OF RECORD.--March 1948 to September 1965, October 1970 to current year. Prior to October 1953, published as "at Matilija."

GAGE.--Water-stage recorder. Datum of gage is 0.00 ft (0.00 m) Ventura County Department of Public Works datum. Prior to Nov. 12, 1970, at site near right end of dam at same datum.

REMARKS.--Reservoir is formed by concrete-arch dam. Dam was completed in 1948. Storage began Mar. 14, 1948. Capacity table is dated June 1978 (furnished by Ventura County Flood Control District). Lowest sluice gate silted, elevation, 1,000 ft (304.8 m). Usable capacity, 1,475 acre-ft (1.82 hm^3) between elevations 1,064 ft (324.3 m), lowest usable outlet and 1,095 ft (333.8 m), crest of spillway. Dead storage below lowest usable outlet, 93 acre-ft (115,000 m^3) changed during summer months to 218 acre-ft (269,000 m^3) due to construction. Capacity below spillway, 1,693 acre-ft (2.09 hm^3). Water is released from reservoir to natural stream for recharge of ground-water basin in Ventura River Valley and since May 1959 is at times diverted at Robles diversion dam downstream to Lake Casitas on Coyote Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 7,399 acre-ft (9.12 hm^3) Apr. 3, 1958, elevation, 1,128.10 ft (343.845 m); minimum, 5.90 acre-ft (7,270 m^3) Oct. 31, 1970, elevation, 1,038.31 ft (316.477 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum contents from October 1965 to September 1970, 3,128 acre-ft (3.86 hm^3) Jan. 25, 1969, elevation, 1,103.6 ft (336.38 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,780 acre-ft (2.19 hm^3) Mar. 28, elevation, 1,096.29 ft (334.149 m); minimum, unknown, due to construction.

MONTHEND ELEVATION NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	--	*	--
Oct. 31	--	*	--
Nov. 30	--	*	--
Dec. 31	1,081.40	893	--
CAL YR 1978	--	--	-167
Jan. 31	1,095.64	1,740	+847
Feb. 28	1,095.49	1,730	-10
Mar. 31	1,095.60	1,730	0
Apr. 30	1,095.32	1,710	-20
May 31	1,086.10	1,150	-560
June 30	1,095.23	1,710	+560
July 31	1,060.02	116*	-1,594
Aug. 31	1,059.84	112*	-4
Sept. 30	1,054.73	16*	-96
WTR YR 1979	--	--	--

* Contents below dead storage.

11115500 MATILIJA CREEK AT MATILIJA HOT SPRINGS, CA

LOCATION.--Lat 34°28'58", long 119°18'03", in SW¼NW¼SW¼ sec.28, T.5 N., R.23 W., Ventura County, Hydrologic Unit 18070101, on right bank 0.2 mi (0.3 km) east of Matilija Hot Springs, 0.2 mi (0.3 km) upstream from North Fork, and 0.4 mi (0.6 km) downstream from Matilija Dam.

DRAINAGE AREA.--54.6 mi² (141.4 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to current year. Combined monthly records for creek and diversion, May 1951 to September 1969. Prior to October 1953, published as "at Matilija."

GAGE.--Water-stage recorder. Concrete control since September 1969. Altitude of gage is 900 ft (274 m), from topographic map. Prior to Feb. 11, 1939, at site 0.6 mi (1.0 km) upstream at different datum.

REMARKS.--Records good. Flow regulated by Matilija Reservoir March 1948 to March 1964, capacity, 7,020 acre-ft (8.66 hm³) and partly regulated since March 1964, capacity, 1,693 acre-ft (2.09 hm³), revised. Water diverted at dam by Matilija conduit to Ventura River basin and Ojai Valley for irrigation from May 1951 to January 1969.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft³/s (566 m³/s) Jan. 25, 1969, gage height, 16.5 ft (5.03 m), from rating curve extended above 4,200 ft³/s (119 m³/s) on basis of computation of maximum flow over dam; minimum daily, 0.10 ft³/s (0.003 m³/s) for several days in some years of regulated flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 966 ft³/s (27.3 m³/s) Mar. 28, gage height, 5.11 ft (1.558 m); minimum daily, 0.24 ft³/s (0.007 m³/s) Dec. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	7.6	.25	.34	106	63	157	37	3.7	11	7.3	5.8
2	8.3	7.4	.25	.34	76	57	136	36	3.7	11	7.3	5.7
3	8.3	7.3	.25	.34	59	53	122	35	3.7	12	7.3	5.7
4	8.3	7.1	.25	.34	51	50	111	34	3.7	12	7.3	5.5
5	7.8	7.1	.24	.69	46	47	102	33	3.7	11	7.0	5.4
6	7.8	6.9	.25	.44	43	46	96	32	3.7	12	7.0	5.4
7	7.7	6.8	.27	.34	43	43	90	31	3.7	12	7.0	5.4
8	7.7	6.6	.27	.34	40	42	85	30	3.7	12	6.6	5.3
9	7.6	4.9	.27	.34	39	41	180	29	3.7	12	6.6	5.1
10	7.4	5.2	.27	.34	37	40	69	29	3.7	11	6.5	4.9
11	7.3	7.5	.27	.34	35	38	2.9	28	3.7	10	6.3	36
12	7.1	9.3	.28	.34	33	37	33	27	3.8	10	6.4	51
13	7.0	9.3	.30	.34	36	152	64	26	3.9	11	6.4	9.1
14	6.9	9.6	.30	.39	201	221	62	25	3.9	11	6.3	.97
15	6.9	9.1	.30	.69	100	210	59	25	3.9	11	6.3	1.7
16	6.9	8.5	.31	60	79	102	58	25	3.9	11	6.3	1.5
17	6.9	8.2	.38	59	67	2.6	56	25	3.9	10	6.2	2.2
18	7.1	8.0	.68	46	60	2.5	54	25	3.9	9.7	6.2	3.7
19	6.9	8.0	1.2	38	57	2.4	52	24	3.2	9.3	6.3	4.0
20	6.9	8.0	.80	32	59	2.4	50	24	4.0	9.3	6.3	4.0
21	7.1	9.8	.45	30	126	2.4	48	25	4.0	9.3	6.3	4.0
22	7.1	12	.34	29	93	2.4	47	24	4.1	9.3	6.0	4.4
23	7.0	13	.34	27	88	2.4	46	23	6.1	8.9	6.0	4.4
24	6.8	12	.34	26	79	2.4	44	21	11	167	5.9	4.2
25	6.8	7.1	.34	24	72	2.5	42	21	12	239	5.7	4.2
26	6.9	.27	.34	23	67	2.0	42	21	12	234	5.7	4.4
27	6.8	.29	.34	22	63	64	41	21	11	217	5.5	4.2
28	6.8	.32	.34	21	60	653	39	22	11	38	5.6	4.2
29	6.9	.40	.34	20	---	348	38	136	11	9.3	5.8	4.4
30	7.8	.26	.34	26	---	242	37	205	11	8.1	6.0	4.2
31	8.0	---	.34	106	---	187	---	3.7	---	7.7	5.9	---
TOTAL	227.1	207.84	11.24	594.95	1915	2760.0	2062.9	1102.7	168.3	1165.9	197.3	210.97
MEAN	7.33	6.93	.36	19.2	68.4	89.0	68.8	35.6	5.61	37.6	6.36	7.03
MAX	8.3	13	1.2	106	201	653	180	205	12	239	7.3	51
MIN	6.8	.26	.24	.34	33	2.0	2.9	3.7	3.2	7.7	5.5	.97
AC-FT	450	412	22	1180	3800	5470	4090	2190	334	2310	391	418

CAL YR 1978 TOTAL 51734.78 MEAN 142 MAX 7020 MIN .24 AC-FT 102600
WTR YR 1979 TOTAL 10624.20 MEAN 29.1 MAX 653 MIN .24 AC-FT 21070

11115500 MATILIJA CREEK AT MATILIJA HOT SPRINGS, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.
CHEMICAL ANALYSES: Water years 1972 to current year.

COOPERATION.--Chemical-quality records were furnished by California Department of Water Resources.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
NOV											
24...	1135	12	830	8.3	11.0	6	10.6	400	110	29	45
JAN											
29...	1650	26	770	8.7	7.0	1	12.0	390	110	28	48
APR											
23...	1520	46	640	8.6	15.0	8	9.9	350	99	25	30
MAY											
14...	1535	25	--	--	18.0	--	--	--	--	--	--
JUL											
20...	1230	9.3	700	8.1	25.0	1	8.7	360	100	27	40

DATE	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)
NOV										
24...	20	1.0	3.0	180	260	25	.7	620	.14	.60
JAN										
29...	18	.9	2.0	170	270	19	.7	525	.02	.10
APR										
23...	16	.7	2.0	160	230	8.0	.6	512	.02	.10
MAY										
14...	--	--	--	--	--	--	--	--	--	--
JUL										
20...	19	.9	2.0	160	250	16	.7	573	.05	.20

DATE	TIME	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV									
24...	1135	--	300	--	--	--	--	--	--
JAN									
29...	1650	--	600	--	--	--	--	--	--
APR									
23...	1520	--	300	--	--	--	--	--	--
MAY									
14...	1535	0	--	0	10	10	0	.0	0
JUL									
20...	1230	--	500	--	--	--	--	--	--

11116000 NORTH FORK MATILIJA CREEK AT MATILIJA HOT SPRINGS, CA

LOCATION.--Lat 34°29'33", long 119°18'20", in NE¼NW¼NE¼ sec.29, T.5 N., R.23 W., Ventura County, Hydrologic Unit 18070101, on right bank at bridge on State Highway 33, 0.7 mi (1.1 km) north of Matilija Hot Springs, and 0.8 mi (1.3 km) upstream from mouth.

DRAINAGE AREA.--15.6 mi^2 (40.4 km^2).

PERIOD OF RECORD.--October 1928 to September 1932, October 1933 to current year. Prior to October 1953, published as "at Matilija."

GAGE.--Water-stage recorder. Concrete control since September 1966. Datum of gage is 1,141.62 ft (347.966 m) National Geodetic Vertical Datum of 1929 (levels by Ventura County Flood Control District). Prior to Nov. 12, 1948, at site 0.3 mi (0.5 km) downstream at different datum.

REMARKS.--Records good. No regulation or diversion above station.

COOPERATION.--Records were furnished by Ventura County Flood Control District and reviewed by the Geological Survey.

AVERAGE DISCHARGE.--50 years, 10.6 ft^3/s (0.300 m^3/s), 7,680 acre-ft/yr (9.47 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,440 ft^3/s (267 m^3/s) Feb. 24, 1969, gage height, 11.0 ft (3.35 m), from floodmark, from rating curve extended above 1,700 ft^3/s (48.1 m^3/s) on basis of slope-area measurement at gage height 10.0 ft (3.05 m); minimum daily, 0.10 ft^3/s (0.003 m^3/s) for several days in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 504 ft^3/s (14.3 m^{3}s) Mar. 28 (0230 hrs), gage height, 4.70 ft (1.433 m), no other peak above base of 400 ft^3/s (11.3 m^3/s); minimum daily, 1.6 ft^{3}s (0.045 m^3/s) Sept. 12-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	4.1	3.8	4.1	49	18	35	10	7.2	3.8	2.2	2.5
2	3.2	4.1	3.8	4.1	30	16	29	9.1	6.8	3.5	2.5	2.2
3	3.2	3.8	3.8	4.1	23	14	29	8.6	6.4	3.8	2.5	2.2
4	3.2	3.8	3.8	4.1	18	13	28	9.1	6.4	3.8	2.5	2.2
5	3.2	3.5	4.1	32	18	12	26	9.1	6.4	4.4	2.5	2.2
6	3.2	3.2	4.1	33	22	10	25	9.1	6.8	3.0	2.5	2.2
7	3.2	3.2	4.1	12	23	10	23	9.1	6.8	3.2	2.5	2.2
8	3.2	3.0	4.1	9.1	21	10	24	10	6.0	3.0	2.5	2.0
9	3.2	3.0	4.1	7.7	17	10	22	9.1	5.6	3.0	2.2	1.8
10	3.2	3.2	4.4	6.8	15	9.0	22	8.2	4.8	3.0	2.2	1.8
11	3.2	4.8	4.4	6.4	13	9.0	21	8.2	4.4	3.0	2.2	1.8
12	3.2	4.0	4.4	6.0	12	8.0	20	7.7	4.1	3.0	2.2	1.6
13	3.2	4.3	4.1	5.6	15	9.0	19	7.7	3.8	2.7	2.5	1.6
14	3.2	4.1	4.1	6.0	63	8.0	18	7.7	3.8	3.0	2.5	1.6
15	3.2	3.8	4.1	59	25	9.0	17	7.2	4.1	3.0	2.5	1.6
16	3.2	3.5	3.8	36	21	9.0	16	7.2	4.1	3.0	2.5	1.6
17	3.2	3.5	7.1	22	18	12	15	8.2	4.1	2.7	2.5	1.6
18	3.2	3.2	13	15	14	10	15	8.2	4.4	2.5	2.5	1.6
19	3.2	3.2	12	12	13	13	14	7.7	4.1	2.5	2.5	1.6
20	3.2	3.2	7.7	9.7	15	13	14	8.2	4.1	2.5	2.7	1.6
21	3.2	5.4	4.8	8.6	39	12	13	8.2	4.8	2.7	2.7	1.6
22	3.2	6.8	6.0	7.7	26	11	13	7.2	4.4	2.7	2.5	1.6
23	3.2	7.0	5.2	7.2	26	10	13	6.4	4.4	2.5	2.5	1.6
24	3.2	6.4	4.4	7.7	20	9.7	12	6.4	4.4	2.7	2.2	1.6
25	3.2	4.8	4.1	7.2	18	9.1	12	6.4	4.8	2.5	2.2	1.6
26	3.2	4.4	4.1	6.8	18	8.6	12	6.4	3.8	2.5	2.2	1.6
27	3.2	4.1	4.1	6.4	18	144	12	6.4	3.0	2.2	2.2	1.6
28	3.2	3.8	4.1	6.4	17	230	11	6.4	3.2	2.2	2.2	1.6
29	3.2	3.8	4.1	6.4	---	87	10	6.4	3.2	2.5	2.5	2.2
30	3.8	3.8	4.1	10	---	56	10	6.4	3.5	2.5	2.5	2.2
31	4.1	---	4.1	61	---	57	---	6.4	---	2.2	2.2	---
TOTAL	100.7	122.8	153.9	430.1	627	856.4	550	242.4	143.7	89.6	74.6	54.7
MEAN	3.25	4.09	4.96	13.9	22.4	27.6	18.3	7.82	4.79	2.89	2.41	1.82
MAX	4.1	7.0	13	61	63	230	35	10	7.2	4.4	2.7	2.5
MIN	3.2	3.0	3.8	4.1	12	8.0	10	6.4	3.0	2.2	2.2	1.6
AC-FT	200	244	305	853	1240	1700	1090	481	285	178	148	108

CAL YR 1978 TOTAL 16671.3 MEAN 45.7 MAX 2520 MIN 3.0 AC-FT 33070
WTR YR 1979 TOTAL 3445.9 MEAN 9.44 MAX 230 MIN 1.6 AC-FT 6830

11117500 SAN ANTONIO CREEK AT CASITAS SPRINGS, CA

LOCATION.--Lat 34°22'49", long 119°18'13", in Santa Ana Grant, Ventura County, Hydrologic Unit 18070101, on left bank at downstream side of bridge on State Highway 33, 0.2 mi (0.3 km) upstream from mouth, and 0.9 mi (1.4 km) north of Casitas Springs.

DRAINAGE AREA.--51.2 mi² (132.6 km²).

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 306.72 ft (93.488 m) National Geodetic Vertical Datum of 1929 (levels by Ventura County Flood Control District). Prior to Jan. 30, 1962, at datum 0.83 ft (0.253 m) higher.

REMARKS.--Records good. No regulation above station; pumping from wells 100 ft (30 m) upstream for irrigation during summer months.

COOPERATION.--Records were furnished by Ventura County Flood Control District; one discharge measurement was made and records reviewed by Geological Survey.

AVERAGE DISCHARGE.--30 years, 12.9 ft³/s (0.365 m³/s), 9,350 acre-ft/yr (11.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,200 ft³/s (459 m³/s) Jan. 25, 1969, gage height, 14.30 ft (4.359 m), from inside gage, from rating curve extended above 2,000 ft³/s (56.6 m³/s) on basis of slope-area measurement of maximum flow; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*), from rating curve extended above 660 ft³/s (18.7 m³/s) on basis of slope-area measurements at gage heights 10.75 ft (3.277 m) and 14.30 ft (4.359 m):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 31	1600	250	7.08	4.51	1.375	Feb. 21	0130	572	16.2	5.24	1.597
Feb. 14	0145	292	8.27	4.62	1.408	Mar. 28	0230	*1,880	53.2	7.00	2.134

Minimum daily discharge, 3.1 ft³/s (0.088 m³/s) Sept. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	5.0	5.0	5.7	65	42	59	21	14	8.8	5.3	4.6
2	5.7	5.0	5.0	5.7	44	19	51	20	13	8.8	5.7	4.2
3	5.3	5.0	5.0	6.1	22	25	41	20	14	8.8	5.7	3.9
4	5.3	5.0	5.0	5.3	16	32	31	20	13	8.3	5.7	3.9
5	5.3	5.0	5.0	28	15	13	29	19	13	8.3	5.7	3.9
6	5.3	5.0	5.0	9.1	13	12	27	19	13	7.3	5.7	4.6
7	5.0	5.0	4.6	8.3	14	12	26	18	13	7.3	5.7	5.0
8	5.0	5.0	5.7	8.3	14	12	25	18	12	6.9	5.0	3.9
9	4.6	5.0	6.9	7.8	14	12	25	18	11	6.9	5.0	3.3
10	4.2	5.3	6.9	7.3	14	15	24	18	11	6.5	4.6	3.3
11	4.2	11	6.9	7.3	14	24	24	17	10	6.1	4.6	3.3
12	4.2	6.5	6.9	7.3	14	12	24	17	10	6.1	4.2	3.3
13	4.2	7.1	6.9	7.3	16	13	24	15	10	8.2	4.2	3.1
14	4.2	6.1	6.9	8.2	64	17	22	15	11	6.9	4.2	3.1
15	4.2	5.3	6.9	41	15	13	22	15	11	6.1	4.2	3.3
16	4.2	5.0	7.3	26	15	15	22	15	9.8	6.1	4.2	3.6
17	4.2	4.6	6.9	12	15	33	21	14	9.8	5.7	4.6	3.3
18	4.2	4.6	12	13	15	19	21	14	10	5.7	4.6	3.6
19	4.2	4.6	10	11	15	28	23	13	10	5.3	5.0	3.6
20	4.2	4.6	6.5	10	23	23	23	14	10	5.0	5.3	4.2
21	4.2	18	6.5	11	158	16	23	14	12	4.6	5.0	4.6
22	4.6	18	7.3	10	51	16	24	13	12	5.3	5.0	4.2
23	4.2	8.8	6.9	10	79	14	24	13	12	5.0	4.6	3.9
24	4.2	6.5	6.9	10	30	16	24	13	12	4.6	4.6	4.2
25	4.2	5.7	6.5	10	23	16	24	13	12	4.6	4.6	4.2
26	4.2	5.7	6.5	10	19	15	22	13	10	5.0	4.2	4.2
27	4.6	5.3	6.5	10	18	368	20	14	9.8	5.0	4.2	4.2
28	4.6	5.3	6.5	10	18	620	20	14	9.3	4.6	4.2	4.6
29	4.6	5.0	6.5	10	---	234	22	13	9.3	5.0	5.0	8.3
30	5.0	5.0	6.5	15	---	117	22	13	9.3	5.0	5.0	4.2
31	5.0	---	6.1	113	---	72	---	13	---	5.0	4.6	---
TOTAL	142.8	193.0	204.0	453.7	833	1895	789	486	336.3	192.9	150.2	121.6
MEAN	4.61	6.43	6.58	14.6	29.8	61.1	26.3	15.7	11.2	6.22	4.85	4.05
MAX	5.7	18	12	113	158	620	59	21	14	8.8	5.7	8.3
MIN	4.2	4.6	4.6	5.3	13	12	20	13	9.3	4.6	4.2	3.1
AC-FT	283	383	405	900	1650	3760	1560	964	667	383	298	241

CAL YR 1978 TOTAL 27523.17 MEAN 75.4 MAX 4380 MIN .29 AC-FT 54590
WTR YR 1979 TOTAL 5797.50 MEAN 15.9 MAX 620 MIN 3.1 AC-FT 11500

11117600 COYOTE CREEK NEAR OAK VIEW, CA

LOCATION.--Lat 34°25'02", long 119°22'01", in Santa Ana Grant, Ventura County, Hydrologic Unit 18070101, on right bank 1,000 ft (305 m) downstream from Los Padres National Forest boundary, 0.6 mi (1.0 km) upstream from Poplin Creek, and 4.2 mi (6.8 km) northwest of Oak View.

DRAINAGE AREA.--13.2 mi² (34.2 km²).

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 560.47 ft (170.831 m) Water and Power Resources Service datum.

REMARKS.--Records good except those for Feb. 24 to Aug. 23 when gage was in backwater, which are poor. No regulation or diversion above station.

AVERAGE DISCHARGE.--21 years, 7.80 ft³/s (0.221 m³/s), 5,650 acre-ft/yr (6.97 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,000 ft³/s (227 m³/s) Jan. 25, 1969, gage height, 12.00 ft (3.658 m), from floodmarks, from rating curve extended above 2,100 ft³/s (59.5 m³/s) on basis of slope-area measurements at gage heights 9.10 ft (2.774 m) and 12.00 ft (3.658 m); no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.25 m³/s) and maximum (*), from rating curve extended above 6.0 ft³/s (0.17 m³/s) on basis of slope-area measurement at gage height 12.00 ft (3.658 m):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 31	1730	269	7.62	5.36	1.634						
Feb. 21	0130	595	16.9	5.96	1.817	Mar. 27	0600	*Unknown		†7.77	2.368

† Gage in backwater from Casitas Reservoir.
Minimum daily discharge, 0.40 ft³/s (0.011 m³/s) Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.77	.78	1.1	1.1	76	12	36	4.9	2.9	1.8	.85	.54
2	.76	.77	1.1	1.0	37	9.4	29	4.8	2.9	1.7	.83	.54
3	.76	.77	1.1	1.0	19	8.3	22	4.7	2.8	1.7	.81	.49
4	.74	.77	1.1	1.0	10	7.4	18	4.6	2.8	1.7	.79	.49
5	.75	.79	1.1	16	7.3	6.7	14	4.5	2.8	1.6	.78	.49
6	.72	.79	1.1	14	5.9	6.0	12	4.4	2.7	1.6	.76	.49
7	.69	.77	1.2	3.7	5.4	5.6	11	4.3	2.6	1.6	.74	.49
8	.70	.76	1.2	2.5	4.9	5.2	11	4.3	2.6	1.5	.72	.49
9	.68	.78	1.2	2.3	4.4	4.9	10	4.2	2.6	1.5	.70	.49
10	.66	.80	1.1	2.0	4.0	4.6	9.4	4.2	2.5	1.5	.68	.44
11	.64	1.3	1.1	1.8	3.6	4.3	8.8	4.1	2.5	1.4	.66	.44
12	.63	.96	1.1	1.6	3.4	4.1	8.4	4.1	2.4	1.4	.65	.44
13	.63	1.1	1.2	1.5	3.9	3.9	8.1	4.0	2.4	1.4	.64	.44
14	.62	1.1	1.2	1.6	35	3.8	7.9	3.9	2.4	1.3	.62	.44
15	.61	1.1	1.2	12	10	3.9	7.6	3.9	2.3	1.3	.61	.44
16	.62	1.0	1.2	15	7.9	4.0	7.4	3.8	2.3	1.3	.60	.44
17	.63	1.0	2.9	8.0	6.3	6.0	7.1	3.8	2.2	1.2	.58	.44
18	.63	1.1	6.9	5.6	5.4	5.0	6.8	3.7	2.2	1.2	.57	.40
19	.61	1.1	7.8	4.3	5.0	5.8	6.6	3.6	2.2	1.2	.56	.44
20	.64	1.0	2.9	3.4	7.5	3.5	6.4	3.6	2.1	1.1	.55	.44
21	.66	1.3	2.0	2.9	163	3.2	6.2	3.5	2.1	1.1	.54	.44
22	.64	1.9	1.7	2.6	51	3.1	6.0	3.5	2.0	1.1	.54	.44
23	.63	1.7	1.5	2.4	83	3.1	5.9	3.4	2.0	1.1	.54	.44
24	.63	1.4	1.4	2.2	40	3.0	5.7	3.3	2.0	1.0	.54	.44
25	.66	1.3	1.3	2.1	20	3.0	5.6	3.3	1.9	1.0	.49	.44
26	.68	1.2	1.3	1.9	15	4.0	5.4	3.2	1.9	.98	.49	.44
27	.72	1.2	1.2	1.9	12	150	5.3	3.2	1.9	.96	.49	.45
28	.74	1.1	1.2	1.8	11	230	5.2	3.1	1.9	.94	.54	.45
29	.75	1.1	1.2	1.7	---	120	5.1	3.1	1.8	.92	.60	.45
30	.79	1.1	1.2	4.6	---	72	5.0	3.0	1.8	.90	.54	.45
31	.77	---	1.2	134	---	50	---	3.0	---	.87	.54	---
TOTAL	21.16	31.84	54.0	257.5	656.9	755.8	302.9	119.0	69.5	39.87	19.55	13.75
MEAN	.68	1.06	1.74	8.31	23.5	24.4	10.1	3.84	2.32	1.29	.63	.46
MAX	.79	1.9	7.8	134	163	230	36	4.9	2.9	1.8	.85	.54
MIN	.61	.76	1.1	1.0	3.4	3.0	5.0	3.0	1.8	.87	.49	.40
AC-FT	42	63	107	511	1300	1500	601	236	138	79	39	27

CAL YR 1978 TOTAL 15186.19 MEAN 41.6 MAX 2980 MIN .61 AC-FT 30120
WTR YR 1979 TOTAL 2341.77 MEAN 6.42 MAX 230 MIN .40 AC-FT 4640

11117800 SANTA ANA CREEK NEAR OAK VIEW, CA

LOCATION.--Lat 34°25'25", long 119°20'25", in Santa Ana Grant, Ventura County, Hydrologic Unit 18070101, on upstream end of right abutment of bridge on Santa Ana Road, 400 ft (120 m) upstream from unnamed tributary, and 3.0 mi (4.8 km) northwest of Oak View.

DRAINAGE AREA.--9.11 mi² (23.6 km²).

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 612.43 ft (186.669 m) Water and Power Resources Service datum. Prior to Aug. 17, 1970, on downstream end of right abutment at same datum.

REMARKS.--Records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--21 years, 5.86 ft³/s (0.166 m³/s), 4,250 acre-ft/yr (5.24 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,330 ft³/s (151 m³/s) Mar. 4, 1978, gage height, 10.01 ft (3.051 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurement at gage height 8.57 ft (2.612 m), maximum gage height, 10.70 ft (3.261 m) Jan. 25, 1969; no flow at times in each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 2, 1938, reached a discharge of 3,780 ft³/s (107 m³/s), by slope-area measurement at site 2.0 mi (3.2 km) downstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.25 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 21	0100	242	6.85	5.70	1.737
Mar. 27	0600	*532	15.1	6.41	1.954

Minimum daily discharge, no flow Aug. 27-29, Sept. 1-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.22	.75	1.0	26	11	22	5.3	.94	.13	.05	
2	.12	.25	.79	1.0	18	8.4	18	5.1	1.6	.14	.06	
3	.12	.22	.79	1.1	12	7.4	16	4.9	1.5	.15	.06	
4	.12	.19	.81	1.1	8.6	6.9	14	4.8	1.5	.25	.06	
5	.12	.19	.81	8.4	7.0	6.4	12	4.3	1.7	.25	.05	
6	.13	.19	.76	9.7	6.0	6.0	12	2.6	1.7	.24	.04	
7	.13	.16	.77	3.7	5.3	5.9	11	2.9	1.9	.20	.04	
8	.13	.14	.80	2.5	5.0	5.7	10	2.6	1.7	.15	.03	
9	.13	.14	.83	2.2	4.9	5.6	9.4	2.8	1.2	.14	.03	
10	.13	.16	.83	1.7	4.6	5.4	9.3	2.5	.74	.13	.03	
11	.13	.56	.81	1.5	4.2	5.2	8.9	1.7	.81	.12	.03	
12	.13	.91	.76	1.4	3.9	5.0	8.4	1.9	.74	.11	.03	
13	.13	.91	.76	1.4	5.3	5.0	7.9	1.4	.60	.11	.03	
14	.13	.83	.76	1.5	24	5.0	7.1	2.0	.56	.11	.03	
15	.14	.69	.76	10	10	5.1	7.0	1.9	.52	.11	.03	
16	.14	.56	.76	11	8.3	5.4	7.4	1.8	.67	.10	.02	
17	.14	.56	2.2	6.3	7.0	7.8	7.1	1.7	.73	.09	.02	
18	.14	.51	4.9	5.7	6.2	5.7	6.8	1.8	.78	.08	.02	
19	.14	.51	4.9	4.7	5.7	7.4	6.5	1.8	.73	.08	.02	
20	.14	.51	2.5	3.8	9.2	6.2	6.2	1.7	.63	.08	.02	
21	.16	.99	1.9	3.3	62	5.1	5.8	1.7	.49	.08	.02	
22	.16	2.0	1.7	3.1	24	4.9	5.2	1.5	.49	.08	.02	
23	.14	1.5	1.5	2.9	24	4.8	5.8	1.3	.53	.07	.02	
24	.16	1.0	1.4	2.7	16	4.7	5.7	1.2	.47	.07	.01	
25	.19	.83	1.3	2.5	13	4.7	5.5	1.4	.49	.06	.01	
26	.19	.83	1.3	2.4	11	5.1	5.4	2.1	.34	.08	.01	
27	.19	.81	1.2	2.3	9.6	134	5.3	2.2	.22	.08	0	
28	.19	.73	1.2	2.3	8.7	170	5.2	1.6	.18	.07	0	
29	.19	.76	1.2	2.3	---	78	5.2	2.1	.16	.07	0	
30	.19	.78	1.1	4.0	---	42	5.2	1.8	.14	.06	.01	
31	.22	---	1.1	40	---	28	---	.93	---	.06	.01	---
TOTAL	4.59	18.56	41.95	147.5	349.5	687.8	261.3	73.33	24.76	3.55	.81	0
MEAN	.15	.62	1.35	4.76	12.5	19.6	8.71	2.37	.83	.11	.026	0
MAX	.22	2.0	4.9	40	62	170	22	5.3	1.9	.25	.06	0
MIN	.12	.14	.75	1.0	3.9	4.7	5.2	.93	.14	.06	0	0
AC-FT	9.1	37	83	293	693	1210	518	145	49	7.0	1.6	0

CAL YR 1978 TOTAL 9124.27 MEAN 25.0 MAX 1730 MIN .09 AC-FT 18100
WTR YR 1979 TOTAL 1533.65 MEAN 4.20 MAX 170 MIN 0 AC-FT 3040

11117900 LAKE CASITAS NEAR CASITAS SPRINGS, CA

LOCATION.--Lat 34°22'24", long 119°19'56", in Santa Ana Grant, Ventura County, Hydrologic Unit 18070101, on left end of dam on Coyote Creek, 1.5 mi (2.4 km) west of Casitas Springs.

DRAINAGE AREA.--38.6 mi^2 (100.0 km^2).

PERIOD OF RECORD.--December 1978 to September 1979. Daily readings prior to December 1978 in files of Casitas Municipal Water District.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service).

REMARKS.--Reservoir is formed by earthfill dam. Storage began January 1959. Capacity table is dated December 1958. Usable capacity, 250,835 acre-ft (309 hm^3) between bottom of lowest outlet gate at elevation 350.00 ft (106.680 m) and crest of spillway at elevation 567.00 ft (172.822 m). Dead storage, 3,167 acre-ft (3.90 hm^3) included in contents. Flow from Ventura River is diverted at Robles Diversion Dam through concrete canal to Lake Casitas and is included in these records.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 255,100 acre-ft (315 hm^3) Apr. 1, 1979, elevation 567.40 ft (172.944 m); minimum, 240,000 acre-ft (296 hm^3) Dec. 16, 1978, elevation 561.75 (171.221 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 255,100 acre-ft (315 hm^3) Apr. 1, elevation 567.40 ft (172.944 m); minimum, 240,000 acre-ft (296 hm^3) Dec. 16, elevation 561.75 ft (171.221 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	--	--	--
Oct. 31	--	--	--
Nov. 30	--	--	--
Dec. 31	561.83	240,200	--
CAL YR 1978	--	--	--
Jan. 31	562.49	241,900	+1,700
Feb. 28	565.05	248,800	+6,900
Mar. 31	567.39	255,100	+6,300
Apr. 30	566.91	253,800	-1,300
May 31	566.43	252,500	-1,300
June 30	565.46	249,900	-2,600
July 31	564.92	248,400	-1,500
Aug. 31	563.75	245,300	-3,100
Sept. 30	562.68	242,400	-2,900
WTR YR 1979	--	--	--

11118000 COYOTE CREEK NEAR VENTURA, CA

LOCATION.--Lat 34°21'26", long 119°18'46", near southeast corner of Santa Ana Grant, Ventura County, Hydrologic Unit 18070101, on right bank 200 ft (60 m) downstream from bridge on Santa Ana Road, 0.3 mi (0.5 km) upstream from mouth, 1.6 mi (2.6 km) downstream from Casitas Reservoir, and 5.5 mi (8.8 km) northwest of Ventura.

DRAINAGE AREA.--41.2 mi² (106.7 km²).

PERIOD OF RECORD.--October 1927 to September 1932, October 1933 to September 1958, October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 224.95 ft (68.565 m) Ventura County Flood Control District datum. See WSP 1735 for history of changes prior to Oct. 1, 1969.

REMARKS.--Records fair. Flow mostly regulated by Casitas Reservoir since October 1959, capacity, 267,000 acre-ft (329 hm³).

AVERAGE DISCHARGE.--30 years (water years 1928-32, 1934-58), 13.2 ft³/s (0.374 m³/s), 9,560 acre-ft/yr (11.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s (326 m³/s) Mar. 2, 1938, on basis of slope-area measurement of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 191 ft³/s (5.41 m³/s) Mar. 27, gage height, 8.62 ft (2.627 m); no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	.02	1.9	7.1	42	.74	1.0	.13	.05	.05
2	0	0	0	.02	1.9	3.5	41	.68	.93	.13	.05	.05
3	0	0	0	.02	.67	1.7	39	.68	.90	.13	.05	.05
4	0	0	0	.03	.52	1.4	36	.68	.94	.13	.05	.05
5	0	0	.01	1.1	.47	1.3	34	.63	.80	.11	.05	.05
6	0	.01	.02	.47	.43	1.2	32	.58	.44	.11	.05	.05
7	0	0	.02	.08	.41	1.2	30	.58	.32	.11	.05	.05
8	0	0	.02	.06	.37	1.2	28	.58	.27	.10	.05	.05
9	0	.01	.02	.14	.37	1.2	26	.58	.23	.10	.05	.05
10	0	.02	.03	.08	.35	1.2	26	.58	.20	.09	.05	.05
11	0	.11	.03	.08	.35	1.2	20	.53	.18	.09	.05	.05
12	0	.02	.03	.09	.40	1.2	16	.53	.17	.09	.05	.05
13	0	.11	.03	.10	1.1	1.2	14	.53	.16	.08	.05	.05
14	0	.02	.03	.22	2.3	1.2	12	.53	.15	.08	.05	.05
15	0	.01	.04	2.1	.55	1.2	11	.53	.15	.08	.04	.04
16	0	.01	.04	.48	.60	1.2	9.6	.53	.15	.07	.05	.04
17	0	.01	.25	.26	.52	2.0	8.6	.53	.15	.07	.06	.04
18	0	.01	.50	.50	.54	1.3	7.6	.53	.15	.07	.05	.04
19	0	.01	.17	.22	.54	1.2	6.5	.53	.15	.06	.05	.04
20	0	.01	.03	.20	1.8	1.2	5.2	.53	.15	.06	.06	.04
21	0	.19	.03	.20	7.6	1.2	4.2	.53	.15	.06	.06	.04
22	0	.09	.02	.17	1.9	1.2	3.4	.53	.16	.06	.05	.04
23	0	.02	.02	.16	3.6	1.2	2.6	.49	.16	.06	.05	.04
24	0	.01	.02	.19	1.1	1.2	1.4	.49	.16	.06	.05	.04
25	0	.01	.02	.20	1.0	1.2	1.2	.53	.16	.05	.06	.04
26	0	.01	.02	.17	.91	1.2	1.0	.53	.15	.05	.06	.04
27	0	0	.02	.17	.90	81	.92	.53	.14	.05	.05	.04
28	0	0	.02	.20	1.8	52	.85	.53	.13	.05	.05	.04
29	.01	0	.02	.16	---	30	.84	.53	.13	.05	.06	.05
30	.01	0	.02	.46	---	35	.81	.68	.13	.05	.06	.04
31	.01	---	.02	5.2	---	39	---	.89	---	.05	.06	---
TOTAL	.03	.69	1.50	13.55	34.90	278.1	461.72	17.87	9.06	2.48	1.62	1.35
MEAN	.001	.023	.048	.44	1.25	8.97	15.4	.58	.30	.080	.052	.045
MAX	.01	.19	.50	5.2	7.6	81	42	.89	1.0	.13	.06	.05
MIN	0	0	0	.02	.35	1.2	.81	.49	.13	.05	.04	.04
AC-FT	.06	1.4	3.0	27	69	552	916	35	18	4.9	3.2	2.7

CAL YR 1978 TOTAL 3537.34 MEAN 9.69 MAX 279 MIN 0 AC-FT 7020
WTR YR 1979 TOTAL 822.87 MEAN 2.25 MAX 81 MIN 0 AC-FT 1630

11118500 VENTURA RIVER NEAR VENTURA, CA

LOCATION.--Lat 34°21'08", long 119°18'27", in southeast corner of Santa Ana Grant, Ventura County, Hydrologic Unit 18070101, on right bank 50 ft (15 m) downstream from bridge on Casitas Pass Road at Foster Memorial Park, 0.2 mi (0.3 km) downstream from Coyote Creek, and 5 mi (8 km) north of Ventura.

DRAINAGE AREA.--188 mi² (487 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1911 to January 1914, October 1929 to current year; combined records of river and diversion, October 1932 to current year.

GAGE.--Water-stage recorder on river; water-stage recorder and Parshall flume on diversion. Datum of gage is 205.23 ft (62.554 m) Ventura County Flood Control datum. See WSP 1315-B for history of changes prior to Nov. 2, 1949. Nov. 2, 1949, to June 12, 1969, at site 450 ft (137 m) downstream at datum 4.00 ft (1.219 m) lower.

REMARKS.--Records good. Flow partly regulated since March 1948 by Matilija Reservoir, usable capacity, 1,475 acre-ft (1.82 hm³) and since October 1959 by Casitas Reservoir, capacity, 267,000 acre-ft (329 hm³). Water diverted to Casitas Reservoir on Coyote Creek since January 1959. Diversion by city of Ventura for municipal supply began prior to 1911. AVERAGE DISCHARGE (River only) represents flow to ocean regardless of upstream development. For records of combined discharge of river and Ventura City diversion, see following page.

AVERAGE DISCHARGE.--River only: 52 years (water years 1912-13, 1930-79), 57.9 ft³/s (1.640 m³/s), 41,950 acre-ft/yr (51.7 hm³/yr).
Combined river and diversion: 47 years, 67.3 ft³/s (1.906 m³/s), 48,760 acre-ft/yr (60.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 63,600 ft³/s (1,800 m³/s) Feb. 10, 1978, gage height, 19.14 ft (5.834 m), from rating curve extended above 34,000 ft³/s (963 m³/s); maximum gage height, 24.3 ft (7.41 m) Jan. 25, 1969, present datum, from floodmarks; no flow at times in many years.
Combined river and diversion: Maximum discharge, 63,600 ft³/s (1,800 m³/s) Feb. 10, 1978; no flow Nov. 28, 29, 1977.

EXTREMES FOR CURRENT YEAR.--River only: Maximum discharge, 4,280 ft³/s (121 m³/s) Mar. 28, gage height, 7.43 ft (2.265 m); minimum daily, 0.92 ft³/s (0.026 m³/s) Sept. 20, 27.
Combined river and diversion: Maximum discharge, 4,290 ft³/s (121 m³/s) Mar. 28; minimum daily, 9.1 ft³/s (0.26 m³/s) Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	4.5	9.5	19	145	140	295	66	27	13	5.7	5.7
2	8.8	4.0	13	11	91	95	254	60	27	10	6.0	4.9
3	6.3	3.2	14	8.4	46	81	229	66	24	13	7.3	8.2
4	10	3.9	11	8.8	31	81	207	60	26	11	9.1	4.0
5	9.7	10	13	64	26	71	193	66	23	12	8.6	3.1
6	7.3	8.4	12	56	25	66	177	64	22	11	8.6	3.7
7	7.7	4.7	12	26	24	59	167	55	22	12	8.2	3.7
8	11	4.0	12	21	23	56	161	54	22	11	6.4	4.3
9	8.8	6.3	15	19	21	57	206	49	23	9.6	9.1	3.7
10	5.2	10	15	21	20	62	191	46	22	10	11	2.0
11	3.8	13	12	19	26	66	89	48	17	8.2	8.2	3.4
12	3.0	13	10	15	26	49	81	45	13	7.7	11	2.6
13	4.3	7.3	12	18	31	29	116	40	11	8.6	9.1	2.6
14	8.8	7.3	9.7	21	150	32	107	43	8.6	13	7.7	2.9
15	7.7	10	13	111	30	29	102	45	19	11	6.9	2.6
16	7.3	8.4	13	108	27	33	102	39	18	9.1	6.4	4.9
17	4.7	6.6	17	89	23	65	93	39	18	10	6.0	3.4
18	3.6	8.4	35	59	21	37	89	41	14	6.0	9.1	1.5
19	2.8	8.8	31	44	20	49	81	42	14	6.8	11	1.2
20	2.2	9.7	17	37	23	39	79	46	13	6.0	6.0	.92
21	1.9	14	15	36	281	29	81	38	15	6.0	4.6	1.5
22	2.2	19	15	30	62	28	81	41	15	9.6	6.4	1.6
23	7.0	18	16	31	111	35	79	38	15	8.2	4.9	2.6
24	6.6	13	18	30	49	26	79	33	17	6.4	5.7	3.7
25	4.0	11	19	27	55	30	77	32	13	7.3	10	1.6
26	3.0	11	19	27	95	22	77	38	11	10	8.6	1.2
27	2.4	11	13	31	92	737	69	42	11	8.6	4.9	.92
28	2.2	14	7.7	32	86	1730	69	42	10	10	4.9	3.1
29	5.2	16	15	27	---	719	71	30	10	6.8	4.9	4.0
30	8.4	10	16	39	---	453	69	24	13	7.3	4.6	4.6
31	7.0	---	17	343	---	362	---	25	---	6.0	5.3	---
TOTAL	182.9	288.5	466.9	1428.2	1660	5367	3771	1405	513.6	285.2	226.2	94.14
MEAN	5.90	9.62	15.1	46.1	59.3	173	126	45.3	17.1	9.20	7.30	3.14
MAX	11	19	35	343	281	1730	295	66	27	13	11	8.2
MIN	1.9	3.2	7.7	8.4	20	22	69	24	8.6	6.0	4.6	.92
AC-FT	363	572	926	2830	3290	10650	7480	2790	1020	566	449	187

CAL YR 1978 TOTAL 120354.08 MEAN 330 MAX 22000 MIN 0 AC-FT 238700
WTR YR 1979 TOTAL 15688.64 MEAN 43.0 MAX 1730 MIN .92 AC-FT 31120

11118500 VENTURA RIVER NEAR VENTURA, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF VENTURA RIVER AND VENTURA CITY DIVERSION NEAR VENTURA, CA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	14	20	23	156	141	303	77	39	21	19	14
2	19	16	20	22	102	100	263	72	35	20	16	11
3	18	14	20	20	54	88	239	75	34	23	17	17
4	17	11	20	21	37	88	218	71	35	21	15	15
5	17	16	22	75	35	80	203	72	34	20	14	16
6	19	16	20	65	39	77	187	70	33	21	17	14
7	19	16	21	34	35	71	175	65	33	19	18	13
8	15	14	20	30	32	73	165	64	30	19	18	11
9	18	15	23	30	31	66	215	63	32	21	18	12
10	18	15	22	32	28	70	202	57	31	21	18	12
11	17	18	22	29	27	74	96	56	27	20	17	13
12	13	20	19	25	27	58	82	55	26	20	17	14
13	13	20	21	28	32	42	122	56	27	21	18	14
14	17	17	19	30	156	43	116	54	27	21	19	14
15	16	16	21	120	41	40	109	56	28	19	19	11
16	17	17	21	117	35	43	112	50	27	18	16	12
17	17	18	25	100	30	72	103	50	26	21	15	16
18	12	16	42	70	28	43	99	51	24	18	16	14
19	12	16	40	55	28	57	90	50	25	22	18	15
20	13	17	26	46	31	50	88	52	25	20	16	12
21	11	25	25	43	289	39	90	49	27	17	17	14
22	11	26	25	41	65	37	90	52	25	17	16	9.6
23	14	22	25	41	112	47	88	49	23	18	15	9.1
24	18	21	24	40	50	35	89	46	23	18	18	17
25	17	20	23	38	56	34	88	46	22	17	18	11
26	14	20	23	38	96	35	88	46	23	17	15	10
27	12	20	26	42	93	748	78	48	21	19	16	10
28	11	20	21	37	87	1740	76	48	20	17	15	13
29	13	20	22	38	---	728	78	42	21	13	15	13
30	16	22	24	50	---	462	78	35	21	17	16	12
31	16	---	23	353	---	369	---	35	---	16	16	---
TOTAL	478	538	725	1733	1832	5650	4030	1712	824	592	518	388.7
MEAN	15.4	17.9	23.4	55.9	65.4	182	134	55.2	27.5	19.1	16.7	13.0
MAX	19	26	42	353	289	1740	303	77	39	23	19	17
MIN	11	11	19	20	27	34	76	35	20	13	14	9.1
AC-FT	948	1070	1440	3440	3630	11210	7990	3400	1630	1170	1030	771

CAL YR 1978 TOTAL 123585.9 MEAN 339 MAX 22000 MIN 3.5 AC-FT 245100
WTR YR 1979 TOTAL 19020.7 MEAN 52.1 MAX 1740 MIN 9.1 AC-FT 37730

11118500 VENTURA RIVER NEAR VENTURA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1907 to December 1908, water years 1967 to current year.
CHEMICAL ANALYSES: December 1907 to December 1908, water years 1967 to current year.
WATER TEMPERATURES: Water years 1969, 1971-73, 1975 to current year.
SEDIMENT RECORDS: Water years 1969-73, 1975 to current year.

PERIOD OF DAILY RECORD.--
SEDIMENT RECORDS: October 1968 to September 1973, October 1974 to current year.
WATER TEMPERATURES: October 1968 to September 1969, October 1970 to September 1973, October 1975 to current year.

COOPERATION.--Chemical-quality data were furnished by California Department of Water Resources.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 32,000 mg/L (estimated) Jan. 25, 1969; minimum daily mean, no flow for many days most years.
SEDIMENT DISCHARGE: Maximum daily, 2,220,000 tons (2,014,000 metric tons), estimated, Jan. 25, 1969; minimum daily, 0 tons on many days most years.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 5,180 mg/L Mar. 28; minimum daily mean, 3 mg/L for many days.
SEDIMENT DISCHARGE: Maximum daily, 21,500 tons (19,500 metric tons) Mar. 28; minimum daily, 0.01 tons (0.01 metric ton) Sept. 18-20, 26, 27.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
NOV											
24...	0940	11	900	8.1	15.0	0	11.1	430	260	38	714
JAN											
15...	0830	98	--	--	12.0	--	--	--	--	--	--
29...	1755	20	870	8.4	12.0	2	10.6	420	270	34	688
31...	0705	342	--	--	8.0	--	--	--	--	--	--
FEB											
02...	1340	155	--	--	10.0	--	--	--	--	--	--
02...	1630	163	--	--	10.0	--	--	--	--	--	--
14...	1205	73	--	--	15.0	--	--	--	--	--	--
23...	0705	135	--	--	9.0	--	--	--	--	--	--
MAR											
27...	1415	516	--	--	17.0	--	--	--	--	--	--
APR											
04...	1325	207	--	--	19.5	--	--	--	--	--	--
17...	1345	93	--	--	21.0	--	--	--	--	--	--
23...	1640	79	790	8.4	21.0	90	8.6	400	260	28	672
JUL											
20...	1010	6.0	810	7.9	24.5	2	11.2	400	270	36	681

11118500 VENTURA RIVER NEAR VENTURA, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY .

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	8.0	11.0	10.0	---	23.0	---	22.0	24.0
2	---	19.0	---	---	10.0	8.0	14.0	21.0	---	20.0	---	---
3	---	---	---	---	8.0	---	---	---	---	20.0	---	---
4	---	19.0	---	14.0	8.0	---	19.5	---	---	---	---	---
5	19.0	---	---	12.0	---	---	---	---	---	---	---	---
6	21.5	---	13.5	11.0	---	---	---	---	19.0	---	25.0	24.0
7	---	---	12.0	---	---	20.0	17.0	22.0	18.0	25.0	---	---
8	---	---	---	---	---	15.0	---	---	---	---	---	---
9	---	15.0	---	14.0	14.0	---	---	---	---	---	---	---
10	23.0	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	17.0	---	---	---	---	22.0	---	24.0	25.0
12	---	---	15.0	---	---	17.0	21.0	25.0	---	24.0	---	---
13	---	13.0	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	15.0	---	---	---	---	---	---	---
15	21.0	---	---	12.0	---	---	---	---	---	---	26.0	---
16	---	---	---	11.5	---	---	---	---	22.0	---	25.0	24.0
17	---	---	14.0	10.0	---	11.0	21.0	21.0	---	25.0	---	---
18	---	17.0	12.0	10.0	---	13.0	---	---	---	---	---	---
19	---	---	10.0	---	---	14.0	---	---	---	---	---	---
20	20.0	---	---	---	14.0	10.0	---	---	---	---	---	---
21	---	15.0	---	---	10.0	---	---	---	23.0	---	---	23.0
22	---	15.0	---	---	8.0	---	21.0	23.0	---	23.0	25.0	---
23	---	---	---	14.0	9.0	---	---	---	---	---	---	---
24	---	---	11.0	---	9.0	---	---	---	---	---	---	---
25	20.0	---	---	---	---	19.0	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	24.0	---	---	---
27	---	17.0	---	---	---	17.0	21.0	20.0	---	24.0	23.0	21.0
28	---	---	---	11.0	---	12.0	---	---	---	---	---	---
29	---	---	15.0	---	---	10.0	---	---	---	---	---	---
30	19.0	---	---	10.0	---	10.0	---	---	---	---	---	---
31	---	---	---	8.0	---	10.0	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	10	7	.19	4.5	5	.06	9.5	5	.13
2	8.8	7	.17	4.0	5	.05	13	6	.21
3	6.3	6	.10	3.2	5	.04	14	6	.23
4	10	6	.16	3.4	4	.04	11	5	.15
5	9.7	6	.16	10	5	.14	13	5	.18
6	7.3	6	.12	8.4	5	.11	12	5	.16
7	7.7	6	.12	4.7	4	.05	12	4	.13
8	11	7	.21	4.0	4	.04	12	3	.10
9	8.8	7	.17	6.3	4	.07	15	3	.12
10	5.2	6	.08	10	5	.14	15	3	.12
11	3.8	5	.05	13	9	.37	12	3	.10
12	3.0	5	.04	13	7	.29	10	3	.08
13	4.3	5	.06	7.3	19	.48	12	3	.10
14	8.8	5	.12	7.3	5	.10	9.7	3	.08
15	7.7	4	.08	10	5	.14	13	3	.11
16	7.3	4	.08	8.4	5	.11	13	3	.11
17	4.7	4	.05	6.6	5	.09	17	9	.46
18	3.6	4	.04	8.4	5	.11	35	53	6.0
19	2.8	4	.03	8.8	5	.12	31	17	1.9
20	2.2	4	.02	9.7	5	.13	17	6	.28
21	1.9	4	.02	14	14	.80	15	6	.24
22	2.2	4	.02	19	15	.80	15	6	.24
23	7.0	5	.09	18	5	.24	16	6	.26
24	6.6	5	.09	13	5	.18	18	6	.29
25	4.0	4	.04	11	5	.15	19	7	.36
26	3.0	4	.03	11	5	.15	19	7	.36
27	2.4	4	.03	11	5	.15	13	7	.25
28	2.2	4	.02	14	5	.19	7.7	6	.12
29	5.2	4	.06	16	5	.22	15	7	.28
30	8.4	5	.11	10	5	.14	16	6	.26
31	7.0	5	.09	---	---	---	17	6	.28
TOTAL	182.9	---	2.65	288.5	---	5.70	466.9	---	13.69

11118500 VENTURA RIVER NEAR VENTURA, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	19	6	.31	145	263	162	140	107	100
2	11	5	.15	91	488	190	95	35	9.0
3	8.4	6	.14	46	50	6.2	81	35	7.7
4	8.8	7	.17	31	26	2.2	81	35	7.7
5	64	219	107	26	23	1.6	71	40	7.7
6	56	120	25	25	23	1.6	66	38	6.8
7	26	30	2.1	24	23	1.5	59	40	6.4
8	21	29	1.6	23	22	1.4	56	25	3.8
9	19	29	1.5	21	21	1.2	57	20	3.1
10	21	29	1.6	20	21	1.1	62	20	3.3
11	19	31	1.6	26	21	1.5	66	15	2.7
12	15	28	1.1	26	21	1.5	49	10	1.3
13	18	29	1.4	31	22	1.8	29	10	.78
14	21	29	1.6	150	669	504	32	10	.86
15	111	707	304	30	45	3.6	29	10	.78
16	108	247	79	27	27	2.0	33	14	1.3
17	89	75	18	23	25	1.6	65	144	35
18	59	60	9.6	21	20	1.1	37	37	3.7
19	44	49	5.8	20	15	.81	49	102	12
20	37	43	4.3	23	18	1.1	39	52	5.5
21	36	39	3.8	281	1060	1690	29	37	2.9
22	30	34	2.8	62	75	13	28	35	2.6
23	31	30	2.5	111	189	88	35	31	2.9
24	30	28	2.3	49	47	6.2	26	30	2.1
25	27	26	1.9	55	42	6.2	30	30	2.4
26	27	24	1.7	95	70	18	22	25	1.5
27	31	22	1.8	92	70	17	737	2050	7570
28	32	20	1.7	86	70	16	1730	3180	21500
29	27	15	1.1	---	---	---	719	490	951
30	39	53	17	---	---	---	453	250	306
31	343	1150	1160	---	---	---	362	240	235
TOTAL	1428.2	---	1762.57	1660	---	2742.21	5367	---	30795.82

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	295	230	183	66	50	8.9	27	50	3.6
2	254	220	151	60	50	8.1	27	50	3.6
3	229	200	124	66	50	8.9	24	50	3.2
4	207	180	101	60	50	8.1	26	50	3.5
5	193	130	68	66	50	8.9	23	40	2.5
6	177	120	57	64	50	8.6	22	30	1.8
7	167	100	45	55	55	8.2	22	30	1.8
8	161	90	39	54	55	8.0	22	30	1.8
9	206	90	50	49	50	6.6	23	30	1.9
10	191	95	49	46	50	6.2	22	30	1.8
11	89	95	23	48	50	6.5	17	30	1.4
12	81	100	22	45	50	6.1	13	30	1.1
13	116	90	28	48	45	5.8	11	30	.89
14	107	85	25	43	40	4.6	8.6	30	.70
15	102	80	22	45	30	3.6	19	35	1.8
16	102	80	22	39	23	2.4	18	40	1.9
17	93	70	18	39	20	2.1	18	40	1.9
18	89	60	14	41	20	2.2	14	40	1.5
19	81	60	13	42	20	2.3	14	40	1.5
20	79	55	12	46	20	2.5	13	40	1.4
21	81	50	11	38	20	2.1	15	40	1.6
22	81	50	11	41	20	2.2	15	40	1.6
23	79	50	11	38	25	2.6	15	40	1.6
24	79	50	11	33	30	2.7	17	35	1.6
25	77	50	10	32	30	2.6	13	35	1.2
26	77	50	10	38	35	3.6	11	30	.89
27	69	50	9.3	42	35	4.0	11	30	.89
28	69	50	9.3	42	40	4.5	10	30	.81
29	71	50	9.6	30	50	4.1	10	25	.68
30	69	50	9.3	24	50	3.2	13	23	.61
31	---	---	---	25	50	3.4	---	---	---
TOTAL	3771	---	1167.5	1405	---	153.6	513.6	---	51.27

11118500 VENTURA RIVER NEAR VENTURA, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	13	21	.74	5.7	12	.18	5.7	5	.08
2	10	18	.49	6.0	11	.18	4.9	5	.07
3	13	20	.70	7.3	10	.20	8.2	5	.11
4	11	20	.59	9.1	10	.25	4.0	5	.05
5	12	20	.65	8.6	9	.21	3.1	5	.04
6	11	20	.59	8.6	8	.19	3.7	5	.05
7	12	20	.65	8.2	8	.18	3.7	5	.05
8	11	20	.59	6.4	8	.14	4.3	4	.05
9	9.6	20	.52	9.1	8	.20	3.7	4	.04
10	10	20	.54	11	8	.24	2.0	4	.02
11	8.2	18	.40	8.2	8	.18	3.4	3	.03
12	7.7	15	.31	11	8	.24	2.6	3	.02
13	8.6	15	.35	9.1	8	.20	2.6	3	.02
14	13	15	.53	7.7	8	.17	2.9	3	.02
15	11	15	.45	6.9	8	.15	2.6	3	.02
16	9.1	18	.44	6.4	7	.12	4.9	3	.04
17	10	20	.54	6.0	7	.11	3.4	3	.03
18	6.0	20	.32	9.1	7	.17	1.5	3	.01
19	6.8	20	.37	11	7	.21	1.2	3	.01
20	6.0	20	.32	6.0	6	.10	.92	3	.01
21	6.0	20	.32	4.6	5	.06	1.5	4	.02
22	9.6	20	.52	6.4	5	.09	1.6	4	.02
23	8.2	20	.44	4.9	5	.07	2.6	4	.03
24	6.4	20	.35	5.7	5	.08	3.7	4	.04
25	7.3	20	.39	10	5	.14	1.6	4	.02
26	10	20	.54	8.6	5	.12	1.2	3	.01
27	8.6	18	.42	4.9	5	.07	.92	3	.01
28	10	19	.49	4.9	5	.07	3.1	3	.03
29	6.8	15	.28	4.9	5	.07	4.0	3	.03
30	7.3	15	.30	4.6	5	.06	4.6	3	.04
31	6.0	15	.24	5.3	5	.07	---	---	---
TOTAL	285.2	---	14.38	226.2	---	4.52	94.14	---	1.02
YEAR	15688.64		36714.93						

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1978	182.90	2.65	0	3
NOVEMBER ...	288.50	5.70	1	7
DECEMBER ...	466.90	13.69	2	16
JANUARY 1979	1428.20	1762.57	148	1910
FEBRUARY ...	1660.00	2742.21	130	2870
MARCH	5367.00	30795.82	7060	37900
APRIL	3771.00	1167.50	434	1600
MAY	1405.00	153.60	22	176
JUNE	513.60	51.27	2	53
JULY	285.20	14.38	1	15
AUGUST	226.20	4.52	0	5
SEPTEMBER ..	94.14	1.02	0	1
TOTAL	15688.64	36714.93	7800	44556

11118500 VENTURA RIVER NEAR VENTURA, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPER- ATURE, WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
JAN								
15...	0830	12.0	98	522	138	64	73	82
31...	0705	8.0	342	1400	1290	--	64	78
FEB								
02...	1340	10.0	155	2400	1000	--	21	28
02...	1630	10.0	163	603	265	54	67	78
14...	1205	15.0	73	525	103	60	76	88
23...	0705	9.0	135	256	93	78	89	95
MAR								
27...	1415	17.0	516	1180	1640	--	57	73
APR								
04...	1325	19.5	207	452	253	40	52	68
17...	1345	21.0	93	1800	452	--	49	66

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
JAN								
15...	90	95	98	99	100	--	--	--
31...	86	94	96	97	98	99	100	--
FEB								
02...	34	38	42	50	63	85	97	99
02...	89	95	99	99	100	--	--	--
14...	97	99	99	100	--	--	--	--
23...	97	98	99	100	--	--	--	--
MAR								
27...	87	95	98	99	100	--	--	--
APR								
04...	82	90	94	97	100	--	--	--
17...	87	98	100	--	--	--	--	--

11119500 CARPINTERIA CREEK NEAR CARPINTERIA, CA

LOCATION (REVISED).--Lat 34°24'05", long 119°29'08", in El Rincon Grant, Santa Barbara County, Hydrologic Unit 18060013, on right bank 100 ft (30 m) upstream of bridge on State Highway 192, 165 ft (50 m) downstream from Gobernador Creek, and 1.8 mi (2.9 km) northeast of Carpinteria.

DRAINAGE AREA.--13.1 mi² (33.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1941 to September 1977, October 1978 to September 1979.

GAGE.--Water-stage recorder. Altitude of gage is 130 ft (40 m), from topographic map. Prior to July 1, 1958, at site 100 ft (30 m) downstream, at datum 6.00 ft (1.829 m) higher. July 2, 1958, to Aug. 27, 1970, at site 65 ft (20 m) downstream at datum 4.00 ft (1.219 m) higher. Aug. 28, 1970 to Sept. 30, 1977, at site 100 ft (30 m) downstream at same datum.

REMARKS.--Records fair. No regulation above station. Gobernador Land and Water Co. diverts from Gobernador Creek 1.8 mi (2.9 km) above station. Small lake 0.8 mi (1.3 km) southeast of station and outside the drainage area stores storm runoff and surplus water diverted by Gobernador Land and Water Co. from Gobernador Creek. At times this lake is drained by pumping water back into Gobernador Creek 1,000 ft (305 m) above station.

AVERAGE DISCHARGE.--37 years (water years 1941-77, 1979), 2.85 ft³/s (0.081 m³/s), 2,060 acre-ft/yr (2.54 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,880 ft³/s (251 m³/s) Dec. 27, 1971, gage height, 14.10 ft (4.298 m), from floodmark, from rating curve extended above 130 ft³/s (3.68 m³/s) on basis of slope-area measurement of maximum flow; no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 516 ft³/s (14.6 m³/s) Mar. 27 (0600 hrs), gage height 5.64 ft (1.719 m), no other peaks above base of 125 ft³/s (3.54 m³/s); no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.07	.23	.25	12	9.3	16	2.5	1.1	.13		
2	0	.08	.16	.25	9.8	4.8	13	2.5	1.1	.12		
3	0	.06	.12	.28	5.0	3.4	11	2.2	1.0	.16		
4	0	.03	.13	.25	2.9	2.8	10	2.1	1.0	.21		
5	0	.03	.13	3.1	2.3	2.5	9.0	2.0	1.0	.23		
6	0	.09	.16	3.5	1.7	2.5	6.4	1.9	1.0	.17		
7	0	.01	.12	.92	1.5	2.6	6.0	1.7	1.1	.13		
8	0	.03	.11	.56	1.3	1.7	5.5	1.6	1.0	0		
9	0	.01	.11	.58	1.2	1.6	5.1	1.5	.73	0		
10	0	.12	.10	.41	1.2	1.5	4.6	1.3	.52	0		
11	0	.88	.10	.35	1.1	1.3	4.4	1.2	.55	0		
12	0	.67	.10	.31	1.2	1.2	4.4	.95	.50	0		
13	0	.95	.10	.27	3.0	1.1	4.1	.85	.44	.01		
14	0	.48	.10	.36	13	1.1	3.7	.82	.02	.05		
15	0	.30	.10	4.8	4.1	1.2	3.7	.90	.72	.09		
16	.03	.27	.11	2.9	3.5	2.3	3.7	1.1	.73	.07		
17	.07	.33	.40	3.1	2.8	4.5	3.8	1.2	1.3	0		
18	.13	.41	4.0	5.0	2.1	1.6	3.9	1.1	1.7	0		
19	.22	.29	3.4	3.6	2.0	3.5	3.7	1.3	1.7	0		
20	.01	.29	.76	1.5	4.1	2.4	3.7	1.1	1.5	0		
21	.04	.85	.55	.61	39	2.0	3.8	1.1	1.5	0		
22	.02	1.2	.47	.54	17	1.5	3.2	1.0	1.5	0		
23	.02	1.1	.39	1.1	24	1.8	3.0	.90	1.1	0		
24	0	.46	.35	.73	10	1.2	2.8	.77	1.2	0		
25	.02	.35	.32	.49	7.3	1.1	2.6	.93	1.3	0		
26	.09	.44	.30	.43	5.5	1.2	2.5	.97	.97	0		
27	.07	.44	.30	.43	5.7	120	2.6	1.0	.44	0		
28	.06	.35	.28	.45	4.3	118	2.4	1.1	.18	0		
29	.04	.37	.27	.43	---	57	2.3	1.1	.11	0		
30	.07	.33	.25	2.5	---	30	2.3	1.1	.03	0		
31	.08	---	.27	16	---	20	---	1.1	---	0		---
TOTAL	.97	11.29	14.29	56.00	188.6	406.7	153.2	40.89	27.04	1.37	0	0
MEAN	.031	.38	.46	1.81	6.74	13.1	5.11	1.32	.90	.044	0	0
MAX	.22	1.2	4.0	16	39	120	16	2.5	1.7	.23	0	0
MIN	0	.01	.10	.25	1.1	1.1	2.3	.77	.02	0	0	0
AC-FT	1.9	22	28	111	374	807	304	81	54	2.7	0	0

WTR YR 1979 TOTAL 900.35 MEAN 2.47 MAX 120 MIN 0 AC-FT 1790

11119500 CARPINTERIA CREEK NEAR CARPINTERIA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: October 1978 to September 1979.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
APR						
09...	0815	5.4	656	8.6	13.5	418
MAY						
03...	1400	2.1	620	8.3	16.5	410
JUN						
11...	0930	.50	660	8.5	19.0	437
JUL						
05...	1345	.27	550	8.3	26.0	368

11119750 MISSION CREEK NEAR MISSION STREET, AT SANTA BARBARA, CA

LOCATION.--Lat 34°25'35", long 119°43'20", in Pueblo Lands of Santa Barbara, Santa Barbara County, Hydrologic Unit 18060013, on left bank just south of end of Los Olivos Street in Santa Barbara.

DRAINAGE AREA.--8.38 mi² (21.70 km²).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Concrete-lined channel. Altitude of gage is 105 ft (32 m), from topographic map.

REMARKS.--Records fair except those below 9.0 ft³/s (0.25 m³/s) which are poor. No regulation or diversion above station.

AVERAGE DISCHARGE.--9 years, 3.42 ft³/s (0.097 m³/s), 2,480 acre-ft/yr (3.06 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,580 ft³/s (73.1 m³/s) Jan. 18, 1973, gage height, 4.97 ft (1.515 m), from rating curve extended above 41 ft³/s (1.16 m³/s) on basis of computation of flow in concrete-lined channel; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 667 ft³/s (18.9 m³/s) Mar. 27 (0400 hrs), gage height, 2.76 ft (0.841 m), extended above 80 ft³/s (2.27 m³/s) on basis of computation of flow in concrete-lined channel, no other peak above base of 400 ft³/s (11.3 m³/s); minimum daily, no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	0	2.0	5.8	7.8	.03				0
2		0	0	0	4.8	1.2	5.0	.03				0
3		0	0	0	2.0	.72	3.2	.01				0
4		0	0	0	1.0	.52	2.3	.01				0
5		0	0	11	.50	.42	1.2	0				0
6		0	0	12	.40	.38	.70	0				0
7		0	0	1.1	.30	.34	.54	0				0
8		0	0	0	.28	.31	.42	0				0
9		0	0	.50	.26	.28	.33	0				0
10		0	0	0	.24	.26	.29	0				0
11		.30	0	0	.22	.24	.25	0				0
12		1.0	0	0	.21	.23	.22	0				0
13		1.6	0	0	8.2	.22	.20	0				0
14		.50	0	0	9.3	.21	.19	0				0
15		0	0	16	1.1	1.7	.17	0				0
16		0	0	2.0	4.0	10	12	0				0
17		0	3.5	.80	1.0	1.0	16	0				0
18		0	7.3	1.0	.60	.80	7.0	0				0
19		0	5.8	.20	.40	4.4	1.1	0				0
20		0	.20	0	15	.55	.12	0				0
21		1.5	0	0	17	.30	.12	0				0
22		23	0	0	13	.16	.11	0				0
23		1.4	0	0	9.6	.10	.11	0				0
24		0	0	0	2.6	.09	.10	0				0
25		0	0	0	1.2	.09	.10	0				0
26		0	0	0	1.1	5.0	.09	0				1.4
27		0	0	0	.90	137	.08	0				2.1
28		0	0	0	.85	82	.06	0				2.0
29		0	0	0	---	42	.05	0				13
30		0	0	1.0	---	15	.04	0				2.2
31		---	0	12	---	11	---	0	---			---
TOTAL	0	29.30	16.80	57.60	98.06	322.32	59.89	.08	0	0	0	20.7
MEAN	0	.98	.54	1.86	3.50	10.4	2.00	.003	0	0	0	.69
MAX	0	23	7.3	16	17	137	16	.03	0	0	0	13
MIN	0	0	0	0	.21	.09	.04	0	0	0	0	0
AC-FT	0	58	33	114	195	639	119	.2	0	0	0	41

CAL YR 1978 TOTAL 5281.42 MEAN 14.5 MAX 879 MIN 0 AC-FT 10480
WTR YR 1979 TOTAL 604.75 MEAN 1.66 MAX 137 MIN 0 AC-FT 1200

11119780 ARROYO BURRO CREEK AT SANTA BARBARA, CA

LOCATION.--Lat 34°26'13", long 119°44'44", in Pueblo Lands of Santa Barbara, Santa Barbara County, Hydrologic Unit 18060013, on right bank 0.4 mi (0.6 km) south of State Street on Hope Avenue in Santa Barbara.

DRAINAGE AREA.--6.65 mi² (17.22 km²).

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WDR CA-76-1: 1974, 1975 (M).

GAGE.--Water-stage recorder. Concrete-lined channel with a low-water control. Altitude of gage is 160 ft (49 m), from topographic map.

REMARKS.--Records good, except those below 1.0 ft³/s (0.028 m³/s) which are poor. Small amount of inflow occurs at times from large shopping center that empties water directly into the stream. Partial regulation by Lauro Canyon Reservoir on San Roque Creek.

AVERAGE DISCHARGE.--9 years, 2.62 ft³/s (0.074 m³/s), 1,900 acre-ft/yr (2.34 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,850 ft³/s (52.4 m³/s) Mar. 4, 1978, gage height, 5.67 ft (1.728 m), from rating curve extended above 50 ft³/s (1.42 m³/s) on basis of computation of flow in trapezoidal section; no flow many days in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 20	2245	390	11.0	3.00	0.914	Sept. 29	0545	484	13.7	3.22	0.981
Mar. 27	0345	*650	18.4	3.58	1.091						

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.01	.01	0	2.1	5.0	3.8	.24	0	0	0	.03
2	.06	.01	.01	.01	4.9	.77	2.9	.23	0	0	.01	.01
3	.11	0	.01	.03	.91	.68	2.5	.20	0	0	.01	.01
4	.01	0	0	.03	.59	.60	2.1	.22	0	0	0	.03
5	.01	0	0	18	.49	.59	1.8	.27	0	0	0	.05
6	.01	.02	0	7.6	.42	.52	1.6	.20	0	0	0	.03
7	.01	.04	0	.29	.37	.47	1.4	.21	.03	0	0	.05
8	0	.01	0	.26	.41	.46	1.2	.18	0	0	.01	.06
9	.09	.03	0	.60	.31	.43	1.1	.13	0	.01	.01	.05
10	.12	.06	0	.02	.26	.39	.94	.06	0	0	.01	.03
11	.05	1.7	0	0	.25	.36	.85	.05	0	0	0	.03
12	.06	0	0	0	.22	.37	.78	.02	0	.01	0	.03
13	.05	1.9	0	0	11	.38	.72	.01	0	0	.01	.02
14	.05	0	0	.91	3.4	.37	.66	.01	0	.01	0	.03
15	.05	0	0	8.7	.93	1.7	.61	.01	0	0	.01	.03
16	.06	0	0	2.1	2.5	14	.56	.01	0	0	0	.03
17	.04	0	2.9	.25	.71	2.1	.53	.04	0	0	0	.04
18	.01	0	6.8	1.2	.40	.47	.48	.02	.01	0	0	.05
19	.02	0	3.4	.15	.35	6.3	.46	.03	.01	.01	0	.08
20	.01	0	.02	.11	19	1.4	.43	.06	0	0	.01	.08
21	0	1.6	0	.08	7.1	.54	.40	.04	.01	.01	0	.09
22	.01	12	0	.05	13	.37	.37	0	0	0	0	.11
23	.01	.10	0	.04	4.7	.32	.35	0	.02	.01	.28	.10
24	0	0	0	.04	1.6	.30	.33	.01	.03	0	.01	.11
25	0	0	0	0	1.4	.31	.31	0	.02	0	.01	.06
26	.01	0	0	0	1.2	9.0	.30	0	.01	0	.01	.02
27	.01	0	.01	0	.94	118	.28	0	.02	0	.01	.05
28	.02	0	.01	0	.85	59	.27	0	.01	.01	.01	.02
29	0	0	.01	0	---	27	.26	0	0	0	.01	8.4
30	.01	.01	.01	1.5	---	8.5	.25	0	0	.01	.03	.04
31	.01	---	.02	13	---	6.2	---	0	---	.01	.04	---
TOTAL	.92	17.49	13.21	54.97	80.31	266.90	28.54	2.25	.17	.09	.49	9.77
MEAN	.030	.58	.43	1.77	2.87	8.61	.95	.073	.006	.003	.016	.33
MAX	.12	12	6.8	18	19	118	3.8	.27	.03	.01	.28	8.4
MIN	0	0	0	0	.22	.30	.25	0	0	0	0	.01
AC-FT	1.8	35	26	109	159	529	57	4.5	.3	.2	1.0	19

CAL YR 1978 TOTAL 3506.89 MEAN 9.61 MAX 585 MIN 0 AC-FT 6960
WTR YR 1979 TOTAL 475.11 MEAN 1.30 MAX 118 MIN 0 AC-FT 942

11119940 MARIA YGNACIO CREEK AT UNIVERSITY DRIVE, NEAR GOLETA, CA

LOCATION.--Lat 34°26'42", long 119°48'10", in Goleta Grant, Santa Barbara County, Hydrologic Unit 18060013, on right bank at University Drive, 0.2 mi (0.3 km) east of Patterson Avenue, and 1.5 mi (2.4 km) northeast of Goleta.

DRAINAGE AREA.--6.35 mi² (16.4 km²).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 60 ft (18 m), from topographic map.

REMARKS.--Records fair. No regulation. Some pumping for irrigation.

AVERAGE DISCHARGE.--9 years, 1.76 ft³/s (0.050 m³/s), 1,280 acre-ft/yr (1.58 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,650 ft³/s (46.7 m³/s) Jan. 16, 1978, gage height, 5.87 ft (1.789 m), from rating curve extended above 290 ft³/s (8.21 m³/s) on basis of slope-area measurement of peak flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 301 ft³/s (8.52 m³/s) Mar. 27 (time unknown), gage height, 2.70 ft (0.823 m), no other peak above base of 75 ft³/s (2.12 m³/s); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.01	.12	3.7	1.9	2.1	.12	.02			0
2		0	.04	.11	2.2	.85	1.6	.10	0			0
3		0	.01	.02	1.1	.77	1.4	.12	.03			0
4		0	.05	.30	.86	.69	1.2	.12	.01			0
5		0	.04	8.2	.73	.59	1.1	.07	0			0
6		0	.03	6.3	.62	.45	1.0	.05	.02			0
7		0	.18	.79	.56	.45	.93	.06	.03			0
8		0	.21	.57	.51	.38	.91	.07	.03			0
9		0	.13	.66	.51	.49	.80	.10	0			0
10		0	.17	.43	.51	.50	.72	.04	0			0
11		.42	.19	.34	.50	.59	.54	.05	0			0
12		0	.14	.76	.43	.65	.48	0	0			0
13		1.6	.05	.88	2.9	.50	.44	0	0			0
14		0	.13	1.1	4.5	.43	.47	0	0			0
15		0	.16	5.4	1.1	.62	.43	.01	0			0
16		0	.05	2.8	1.3	6.0	.44	.11	0			0
17		0	.84	.98	.74	1.4	.32	.11	0			0
18		0	1.3	1.1	.67	.60	.32	.08	.04			0
19		0	1.9	.65	.59	2.7	.35	.19	0			0
20		0	.35	.55	6.9	1.0	.27	.12	0			0
21		.05	.38	.51	13	.70	.26	.09	0			0
22		1.4	.33	.45	9.1	.55	.24	.03	0			0
23		0	.20	.43	5.3	.46	.22	.03	0			0
24		0	.16	.43	2.0	.39	.16	0	0			0
25		0	.16	.36	1.5	.37	.21	.01	0			0
26		0	.23	.41	.99	1.4	.21	.03	0			0
27		0	.19	.39	.70	80	.15	.08	0			0
28		0	.11	.36	.60	46	.16	.10	0			0
29		0	.08	.35	---	21	.19	.01	0			.28
30		0	.06	.63	---	5.1	.19	0	0			0
31		---	.08	5.0	---	2.9	---	0	---			---
TOTAL	0	3.47	7.96	41.38	64.12	180.43	17.81	1.90	.18	0	0	.28
MEAN	0	.12	.26	1.33	2.29	5.82	.59	.061	.006	0	0	.009
MAX	0	1.6	1.9	8.2	13	80	2.1	.19	.04	0	0	.28
MIN	0	0	.01	.02	.43	.37	.15	0	0	0	0	0
AC-FT	0	6.9	16	82	127	358	35	3.8	.4	0	0	.6

CAL YR 1978 TOTAL 2785.38 MEAN 7.63 MAX 429 MIN 0 AC-FT 5520
WTR YR 1979 TOTAL 317.53 MEAN .87 MAX 80 MIN 0 AC-FT 630

11120000 ATASCADERO CREEK NEAR GOLETA, CA

LOCATION.--Lat 34°25'29", long 119°48'39", in La Goleta Grant, Santa Barbara County, Hydrologic Unit 18060013, on downstream side of center pier of county road bridge 100 ft (30 m) downstream from Maria Ygnacio Creek, 1.3 mi (2.1 km) upstream from mouth, and 1.3 mi (2.1 km) southeast of Goleta.

DRAINAGE AREA.--18.9 mi² (49.0 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1941 to current year. Prior to October 1947, published as Alascadero Creek near Goleta.

GAGE.--Water-stage recorder. Datum of gage is 8.59 ft (2.618 m) Santa Barbara County datum. Prior to Dec. 14, 1967, at site 275 ft (84 m) downstream, datum 4.00 ft (1.219 m) higher. Dec. 14, 1967 to Sept. 30, 1976, at datum 4.00 ft (1.219 m) higher, and Oct. 1, 1976 to Sept. 30, 1978, at datum 2.00 ft (0.610 m) higher, both at present site.

REMARKS.--Records fair. No regulation above station. Small diversions for irrigation above station. Some low flow results from return irrigation waste water.

AVERAGE DISCHARGE.--38 years, 4.66 ft³/s (0.132 m³/s), 3,380 acre-ft/yr (4.17 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,380 ft³/s (152 m³/s) Jan. 18, 1973, gage height, 13.1 ft (3.99 m), from rating curve extended above 2,300 ft³/s (65.1 m³/s); maximum gage height, 13.3 ft (4.05 m), from floodmark, Dec. 3, 1974, datum then in use; no flow some days in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*), from rating curve extended above 214 ft³/s (6.06 m³/s) on basis of slope-area measurement at gage height 10.27 ft (3.130 m):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 6	0130	337	9.54	3.21	0.978
Feb. 13	2300	177	5.01	2.67	0.814
Feb. 20	2345	594	16.8	3.83	1.167
Mar. 16	2130	307	8.69	3.08	0.939
Mar. 27	0400	*1,260	35.7	4.98	1.518

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.76	.01	.06	.02	11	19	9.1	.20	.21	.01	0	0
2	.34	.01	.06	.01	11	3.2	6.4	.18	.22	0	0	.02
3	.02	.01	.05	.01	3.3	2.6	4.4	.16	.23	0	0	.05
4	.01	.01	.04	.01	2.4	2.4	3.6	.14	.24	0	0	.08
5	.01	.01	.66	63	1.9	2.2	3.2	.12	.22	0	0	.08
6	.02	.01	.24	43	1.6	1.9	2.8	.10	.20	0	.12	.03
7	.02	.01	.06	2.5	1.3	1.6	2.5	.08	.17	0	.12	.01
8	.02	.01	.05	1.7	1.5	1.6	2.3	.06	.14	0	.08	.01
9	.01	.01	.04	2.6	1.6	1.4	2.1	.05	.11	0	.08	.01
10	.01	.01	.04	1.5	1.0	1.2	1.9	.04	.08	0	.08	.01
11	.01	3.2	.34	1.1	.89	1.0	1.7	.02	.06	0	.05	0
12	.01	1.0	.39	.95	.69	1.0	1.5	.02	.05	0	.05	0
13	.07	11	.04	.82	22	1.1	1.4	.02	.04	0	.05	0
14	.08	2.3	.04	4.6	25	1.0	1.2	.02	.03	0	.03	0
15	.13	.16	.04	25	2.9	4.3	1.1	.50	.02	0	.03	0
16	.11	.07	.04	14	6.8	34	.99	.44	.02	0	.03	.01
17	1.2	.02	6.6	3.8	2.0	19	.87	.38	.01	.06	.01	.01
18	.46	.02	16	5.2	1.1	2.2	.78	.33	0	.14	.01	.01
19	.01	.02	17	1.6	.88	17	.71	.29	0	.06	0	0
20	.01	.46	.84	.81	38	5.3	.65	.26	0	0	0	.01
21	.01	1.4	.34	.68	65	3.9	.58	.22	0	0	0	.01
22	.01	11	1.6	1.2	51	2.0	.52	.19	0	0	0	.01
23	.01	1.4	.24	.73	31	1.4	.47	.14	0	0	0	.01
24	.01	.28	.03	.56	6.9	1.3	.42	.10	0	0	0	.01
25	.01	.04	.03	.47	5.2	3.9	.38	.11	.01	0	0	.01
26	.01	.03	.02	.87	3.2	9.6	.35	.12	.02	0	0	.01
27	.17	.02	.02	.47	2.5	259	.31	.13	.04	0	0	.01
28	.09	.03	.35	.33	2.0	158	.28	.15	.03	0	0	.01
29	.01	.16	.11	.31	---	109	.25	.16	.02	0	0	12
30	.01	.44	.03	1.5	---	23	.22	.18	.02	0	0	1.1
31	.01	---	.03	31	---	13	---	.20	---	0	0	---
TOTAL	3.66	33.15	45.43	210.35	303.66	707.1	52.98	5.11	2.19	.27	.74	13.52
MEAN	.12	1.11	1.47	6.79	10.8	22.8	1.77	.16	.073	.009	.024	.45
MAX	1.2	11	17	63	65	259	9.1	.50	.24	.14	.12	12
MIN	.01	.01	.02	.01	.69	1.0	.22	.02	0	0	0	0
AC-FT	7.3	66	90	417	602	1400	105	10	4.3	.5	1.5	27

CAL YR 1978 TOTAL 7009.68 MEAN 19.2 MAX 943 MIN 0 AC-FT 13900
WTR YR 1979 TOTAL 1378.16 MEAN 3.78 MAX 259 MIN 0 AC-FT 2730

ATASCADERO CREEK BASIN

11120000 ATASCADERO CREEK NEAR GOLETA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1977 to current year.
CHEMICAL ANALYSES: October 1977 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT						
02...	1000	.12	2050	8.2	17.5	1500
NOV						
01...	0905	.01	1680	8.0	15.0	1180
DEC						
04...	1200	.03	2050	7.4	11.5	1500
JAN						
02...	0830	.01	2350	7.8	7.0	1610
FEB						
02...	0925	12	476	7.3	8.0	280
MAR						
02...	0815	3.5	960	7.9	9.0	705
27...	0840	214	315	7.6	12.0	207
MAY						
02...	0815	.18	2690	7.1	16.0	1990
JUN						
04...	0945	.24	2230	8.3	20.0	1630
29...	1400	.02	3550	9.2	34.5	2770

11120500 SAN JOSE CREEK NEAR GOLETA, CA

LOCATION.--Lat 34°27'33", long 119°48'29", in La Goleta Grant, Santa Barbara County, Hydrologic Unit 18060013, on right bank, 1.1 mi (1.8 km) downstream from unnamed tributary, and 1.7 mi (2.7 km) northeast of Goleta.

DRAINAGE AREA.--5.51 mi² (14.27 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1941 to current year.

GAGE.--Water-stage recorder and concrete low-water control. Datum of gage is 95.61 ft (29.142 m) Santa Barbara County Road Department datum. Prior to Dec. 24, 1955, at datum 5.50 ft (1.676 m) higher. Dec. 24, 1955, to Jan. 10, 1960, at datum 1.5 ft (0.46 m) higher. Prior to Oct. 1, 1971, at site 75 ft (23 m) downstream at same datum.

REMARKS.--Records fair. No regulation above station. Many small diversions for irrigation above station.

AVERAGE DISCHARGE.--38 years, 1.97 ft³/s (0.056 m³/s), 1,430 acre-ft/yr (1.76 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft³/s (56.6 m³/s) Jan. 25, 1969, gage height, 10.10 ft (3.078 m), from rating curve extended above 400 ft³/s (11.3 m³/s) on basis of slope-area measurement at gage height 9.32 ft (2.841 m); maximum gage height, 12.74 ft (3.883 m), present datum, Jan. 21, 1943; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 163 ft³/s (4.62 m³/s) Mar. 27 (0345 hrs), gage height 4.34 ft (1.323 m), from rating curve extended above 60 ft³/s (1.70 m³/s) on basis of slope-area measurement at gage height 8.05 ft (2.454 m), no other peaks above base of 100 ft³/s (2.83 m³/s); minimum daily, 0.02 ft³/s (0.001 m³/s) Sept. 20, 22, 23, 25-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	.64	.91	.79	5.1	3.3	5.2	.57	.58	.35	.15	.10
2	1.1	.58	.91	.79	3.2	2.0	3.9	.46	.62	.61	.19	.12
3	1.1	.58	.92	.79	3.0	1.7	3.4	.64	.83	.58	.17	.09
4	1.0	.66	.91	.79	2.2	1.8	3.0	.96	.79	.33	.19	.07
5	1.0	.68	.91	2.8	1.9	1.9	2.6	.91	.79	.33	.25	.06
6	.97	.80	1.0	11	1.7	1.6	2.1	.77	.74	.38	.21	.06
7	.95	.79	.94	1.6	1.5	1.6	2.1	.60	.77	.32	.18	.06
8	.93	.79	.79	1.0	1.2	1.5	2.0	.81	.67	.32	.16	.10
9	.91	.79	.79	.91	1.2	1.3	1.8	.83	.58	.34	.16	.10
10	.89	.79	.79	.91	1.0	1.3	1.4	.77	.49	.29	.16	.14
11	.87	1.1	.79	.91	.92	1.3	1.3	.76	.49	.36	.17	.08
12	.85	1.1	.91	.91	.91	1.3	1.3	.64	.44	.30	.22	.05
13	.84	1.3	.91	.91	2.2	1.3	1.1	.49	.35	.30	.23	.04
14	.83	1.2	.91	.98	14	1.3	1.3	.50	.37	.32	.19	.08
15	.81	1.0	.91	7.6	2.9	1.5	1.3	.50	.45	.54	.16	.12
16	.79	1.0	.91	5.4	2.1	2.4	1.3	.51	.35	.49	.15	.11
17	.77	1.0	1.1	2.6	1.8	2.6	1.5	.51	.43	.35	.16	.08
18	.76	.91	1.5	1.9	1.6	2.1	1.4	.52	.42	.26	.14	.03
19	.75	.91	1.7	1.7	1.4	1.9	1.2	.52	.41	.24	.13	.03
20	.74	.91	.91	1.2	4.7	2.0	1.0	.52	.34	.20	.20	.02
21	.73	.99	.79	1.0	26	1.5	1.1	.53	.35	.23	.15	.03
22	.71	1.6	.79	1.0	7.9	1.2	1.3	.53	.35	.25	.09	.02
23	.70	1.5	.79	.94	12	1.2	.91	.54	.37	.24	.09	.02
24	.69	1.1	.79	.91	4.2	1.0	.80	.54	.41	.19	.09	.05
25	.68	1.0	.79	1.0	3.1	1.0	.68	.54	.40	.15	.09	.02
26	.68	1.0	.79	.95	2.3	1.2	.66	.55	.39	.16	.14	.02
27	.68	1.0	.79	.91	2.0	47	.58	.55	.33	.23	.09	.02
28	.68	1.0	.79	.91	1.9	61	.59	.56	.32	.15	.08	.02
29	.69	.91	.79	.91	---	30	.68	.56	.36	.14	.09	.13
30	.73	.91	.79	.92	---	12	.65	.57	.37	.22	.10	.15
31	.62	---	.79	3.6	---	7.2	---	.57	---	.19	.08	---
TOTAL	25.65	28.54	28.11	58.54	113.93	200.0	48.15	18.85	14.56	9.36	4.66	2.02
MEAN	.83	.95	.91	1.89	4.07	6.45	1.61	.61	.49	.30	.15	.067
MAX	1.2	1.6	1.7	11	26	61	5.2	.96	.83	.61	.25	.15
MIN	.62	.58	.79	.79	.91	1.0	.58	.48	.32	.14	.08	.02
AC-FT	51	57	56	116	226	397	96	37	29	19	9.2	4.0

CAL YR 1978 TOTAL 3174.50 MEAN 8.70 MAX 484 MIN .27 AC-FT 6300
WTR YR 1979 TOTAL 552.37 MEAN 1.51 MAX 61 MIN .02 AC-FT 1100

11120500 SAN JOSE CREEK NEAR GOLETA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1977 to current year.

CHEMICAL ANALYSES: October 1977 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT						
02...	1240	1.1	1200	8.1	18.0	891
NOV						
01...	1130	.69	1180	7.9	16.0	794
DEC						
04...	1240	.91	1100	7.4	12.0	772
JAN						
02...	1200	.74	1100	7.7	9.0	777
FEB						
02...	1215	3.2	550	7.5	10.0	401
MAR						
02...	0900	2.1	655	7.7	9.5	458
27...	0930	56	194	7.3	11.5	138
MAY						
02...	1240	.48	1100	7.8	19.0	809
JUN						
01...	1150	.60	1250	7.8	18.0	853
29...	1130	.36	1370	7.7	20.5	1030
AUG						
01...	1400	.18	1420	7.6	25.0	1060
29...	1150	.13	1660	7.8	19.0	1300

11120510 SAN JOSE CREEK AT GOLETA, CA

LOCATION.--Lat 34°25'49", long 119°49'16", in La Goleta Grant, Santa Barbara County, Hydrologic Unit 18060013, on right bank south of Hollister Avenue on Kellogg Avenue, 0.5 mi (0.8 km) southeast of Goleta.

DRAINAGE AREA.--9.42 mi² (24.40 km²).

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WDR CA-73-1: 1973(M).

GAGE.--Water-stage recorder and concrete channel. Altitude of gage is 10 ft (3 m), from topographic map.

REMARKS.--Records good. No regulation above station. Diversions for irrigation and domestic use above station.

AVERAGE DISCHARGE.--9 years, 3.06 ft³/s (0.087 m³/s), 2,220 acre-ft/yr (2.74 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,330 ft³/s (66.0 m³/s) Mar. 4, 1978, gage height, 5.65 ft (1.722 m), from rating curve extended above 400 ft³/s (11.3 m³/s) on basis of slope-conveyance computation of flow in concrete channel at gage height 8.00 ft (2.438 m); no flow for long periods in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft³/s (7.08 m³/s) revised, and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 13	1500	307	8.69	2.53	0.771	Feb. 20	2245	426	12.1	2.83	0.863
Jan. 6	0045	307	8.69	2.53	0.771	Mar. 27	0415	*487	13.8	2.97	0.905

Minimum daily discharge, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.48	.44	.56	6.3	11	3.9	.41	3.3	0	0	0
2	.21	.38	.45	.55	4.4	2.2	3.2	.36	2.6	0	0	0
3	.15	.33	.44	.55	3.0	1.7	2.7	.51	.91	.14	0	0
4	.22	.32	.49	.58	2.2	1.6	7.2	.66	.63	.03	0	0
5	.21	.36	.54	37	1.7	1.5	5.3	.58	.45	.01	0	0
6	.31	.44	.56	42	1.2	1.6	1.7	.48	.55	.01	0	0
7	.41	.48	.54	2.1	1.0	4.2	1.6	.31	.58	.03	0	0
8	.35	.51	.40	1.0	.95	12	1.5	.52	.41	.03	0	0
9	.33	.46	.40	1.2	.91	11	1.2	.58	.34	.03	0	0
10	.33	.51	.44	.75	.82	1.3	1.1	.50	.08	.04	0	0
11	.37	2.0	.45	.71	.76	1.1	1.1	.44	.11	.03	0	0
12	.36	.63	.53	.69	.73	1.1	.90	.36	.07	.04	0	0
13	.34	10	.57	.71	27	1.1	.80	.35	.03	.05	0	0
14	.33	.58	.52	2.2	41	1.0	.83	.42	0	.03	0	0
15	.31	.45	.56	12	3.2	2.2	.81	.36	.02	.38	0	0
16	.32	.41	.45	7.5	3.7	20	.80	.41	.02	.11	0	0
17	.35	.37	3.3	2.8	1.9	3.7	.79	.63	0	.03	0	0
18	.39	.37	3.4	2.6	1.5	1.3	.68	.66	.01	0	.01	0
19	.24	.37	4.3	1.6	1.4	1.4	.61	.84	.02	0	0	0
20	.23	.42	.88	1.3	29	1.2	.55	.83	.01	0	0	.01
21	.24	.99	.71	1.2	78	1.4	.66	.86	0	0	0	0
22	.28	2.7	.63	1.1	25	.99	.71	.83	0	0	0	0
23	.27	.67	.61	1.0	25	.88	.62	.59	.01	0	0	0
24	.30	.39	.79	1.0	4.3	.83	.60	2.8	.04	0	0	0
25	.34	.39	.61	.91	3.2	.81	.54	3.6	.10	0	0	0
26	.44	.44	.61	.84	2.8	11	.52	.85	.07	0	0	0
27	.58	.44	.61	.78	2.1	119	.47	.80	.04	0	0	0
28	.45	.41	.61	.73	1.9	97	.54	1.0	.01	0	0	0
29	.45	.44	.59	.70	---	47	.64	1.8	.01	0	0	1.6
30	.44	.43	.58	2.0	---	9.6	.63	3.2	0	0	0	0
31	.44	---	.57	15	---	5.7	---	3.0	---	0	0	---
TOTAL	10.11	27.17	26.58	143.66	274.97	376.41	43.20	29.54	10.42	.99	.01	1.61
MEAN	.33	.91	.86	4.63	9.82	12.1	1.44	.95	.35	.032	.0003	.054
MAX	.58	10	4.3	42	78	119	7.2	3.6	3.3	.38	.01	1.6
MIN	.12	.32	.40	.55	.73	.81	.47	.31	0	0	0	0
AC-FT	20	54	53	285	545	747	86	59	21	2.0	.02	3.2

CAL YR 1978 TOTAL 4065.56 MEAN 11.1 MAX 649 MIN 0 AC-FT 8060
WTR YR 1979 TOTAL 944.67 MEAN 2.59 MAX 119 MIN 0 AC-FT 1870

11120550 GAVIOTA CREEK NEAR GAVIOTA, CA

LOCATION.--Lat 34°29'16", long 120°13'34", in Nuestra Senora Del Refugio Grant, Santa Barbara County, Hydrologic Unit 18060013, on left bank 1.3 mi (2.1 km) northwest of Gaviota, and 1.6 mi (2.6 km) upstream from mouth.

DRAINAGE AREA.--18.8 mi² (48.7 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 100 ft (30 m), from topograhic map.

REMARKS.--Records good. No regulation. Small pumping for domestic use.

AVERAGE DISCHARGE.--13 years, 6.08 ft³/s (0.172 m³/s), 4,400 acre-ft/yr (5.43 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft³/s (113 m³/s) Jan. 24, 1967, gage height, 8.40 ft (2.560 m), from rating curve extended above 1,300 ft³/s (36.8 m³/s) on basis of slope-area measurement of maximum flow; maximum gage height, 9.09 ft (2.771 m) Mar. 4, 1978; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximum (*), from rating curve extended above 150 ft³/s (4.25 m³/s) on basis of computation of flow over weir at gage height 9.09 ft (2.771 m):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 15	0500	1,020	28.9	5.95	1.814	Mar. 27	0200	*1,290	36.5	6.44	1.963
Feb. 20	2315	426	12.1	4.57	1.393						

Minimum daily discharge, 0.54 ft³/s (0.015 m³/s) Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.3	1.2	1.6	17	17	16	6.3	2.7	1.7	.78	.71
2	1.2	1.3	1.1	1.7	28	11	14	6.0	2.7	1.7	.79	.68
3	1.3	1.2	1.1	1.7	13	9.9	12	6.0	2.7	1.7	.81	.64
4	1.3	1.3	1.1	1.6	7.5	9.3	10	5.9	2.6	1.7	.79	.64
5	1.2	1.4	1.1	17	5.4	9.3	9.8	5.5	2.5	1.6	.74	.64
6	1.2	1.5	1.0	6.5	4.0	8.6	9.4	5.1	2.6	1.5	.72	.64
7	1.2	1.6	.99	2.7	3.3	8.3	9.0	5.2	2.5	1.4	.69	.69
8	1.3	1.6	.99	2.3	3.3	8.0	8.4	5.0	2.4	1.4	.66	.63
9	1.3	1.7	1.1	2.3	3.1	7.7	8.0	4.5	2.2	1.3	.64	.60
10	1.2	1.8	1.2	1.9	2.9	7.4	7.8	4.0	2.0	1.3	.69	.60
11	1.1	2.3	1.2	1.9	2.7	6.9	7.6	3.8	2.0	1.3	.71	.59
12	.94	2.0	1.2	1.9	2.5	6.9	7.0	3.5	1.9	1.3	.70	.59
13	.97	5.6	1.2	1.8	9.8	6.7	6.7	3.3	1.8	1.3	.67	.56
14	1.0	1.8	1.1	6.4	15	6.4	7.0	3.1	1.9	1.2	.67	.54
15	1.0	1.5	1.1	115	5.5	8.2	6.7	3.2	1.9	1.2	.66	.55
16	1.0	1.4	1.1	26	18	8.2	6.7	3.3	2.0	1.2	.69	.60
17	1.1	1.4	4.7	8.5	7.2	12	6.1	3.3	2.0	1.1	.76	.60
18	1.1	1.4	3.3	8.5	5.2	6.9	6.3	3.4	2.0	1.1	.85	.59
19	1.0	1.5	5.0	4.7	4.2	7.0	6.1	3.5	1.8	1.1	.86	.57
20	.99	1.6	1.8	3.6	35	6.3	5.9	3.3	1.8	1.2	.84	.68
21	.99	14	1.6	3.1	53	5.8	5.7	3.2	1.8	1.1	.79	.72
22	1.0	12	1.5	2.8	51	5.4	6.0	3.1	1.7	1.0	.74	.72
23	.96	2.2	1.4	2.5	47	5.0	6.0	2.9	1.8	.95	.70	.68
24	.98	1.5	1.6	2.2	22	4.8	5.8	2.9	1.8	.90	.70	.70
25	1.1	1.3	1.6	2.2	17	4.8	5.9	2.9	1.8	.90	.73	.67
26	1.1	1.2	1.6	2.0	12	9.2	6.3	2.9	1.7	.92	.69	.67
27	1.1	1.2	1.6	1.8	8.0	209	6.5	2.9	1.7	.89	.84	.69
28	1.1	1.1	1.6	2.0	6.0	48	6.2	2.8	1.6	.84	.70	.70
29	1.2	1.1	1.6	1.8	---	48	5.9	2.6	1.6	.76	.71	1.1
30	1.3	1.1	1.6	13	---	28	6.1	2.6	1.6	.79	.68	.73
31	1.3	---	1.7	42	---	20	---	2.6	---	.80	.69	---
TOTAL	34.63	71.9	49.98	303.0	408.6	560.6	230.9	118.6	61.1	37.15	22.49	19.72
MEAN	1.12	2.40	1.61	9.77	14.6	18.1	7.70	3.83	2.04	1.20	.73	.66
MAX	1.3	14	5.0	115	53	209	16	6.3	2.7	1.7	.85	1.1
MIN	.94	1.1	.99	1.6	2.5	4.8	5.7	2.6	1.6	.76	.64	.54
AC-FT	69	143	99	601	810	1110	458	235	121	74	45	39

CAL YR 1978 TOTAL 8450.46 MEAN 23.2 MAX 1210 MIN .13 AC-FT 16760
WTR YR 1979 TOTAL 1918.87 MEAN 5.26 MAX 209 MIN .54 AC-FT 3810

11120600 JALAMA CREEK NEAR LOMPOC, CA

LOCATION.--Lat 34°30'50", long 120°29'02", in San Julian Grant, Santa Barbara County, Hydrologic Unit 18060013, on downstream side of right bridge pier on Jalama Road, 0.6 mi (1.0 km) downstream from Gasper Creek, 1.4 mi (2.3 km) upstream from mouth, and 8.9 mi (14.3 km) southwest of Lompoc.

DRAINAGE AREA.--20.5 mi² (53.1 km²).

PERIOD OF RECORD.--September 1965 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 80 ft (24 m), from topographic map.

REMARKS.--Records good. No regulation or diversion above station. Some pumping upstream from wells for irrigation of about 400 acres (1.62 km²).

AVERAGE DISCHARGE.--14 years, 3.71 ft³/s (0.105 m³/s), 2,690 acre-ft/yr (3.32 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,020 ft³/s (114 m³/s) Mar. 4, 1978, gage height, 11.34 ft (3.456 m), from rating curve extended above 1,700 ft³/s (48.1 m³/s) on basis of slope-area measurement at gage height 8.05 ft (2.454 m); no flow many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.25 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 15	0500	316	8.95	4.96	1.512	Feb. 20	2245	627	17.8	5.94	1.811
Jan. 31	1545	314	8.89	4.95	1.509	Mar. 27	0215	*687	19.5	6.10	1.859

Minimum daily discharge, 0.11 ft³/s (0.003 m³/s) Sept. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	.93	.70	.85	14	13	8.1	1.8	1.0	.47	.42	.22
2	.49	.94	.76	.85	21	7.0	6.9	1.8	1.2	.52	.28	.20
3	.60	.49	.76	.85	11	5.9	6.2	1.8	1.2	.64	.31	.13
4	.65	.49	.76	.85	5.2	5.3	5.6	1.8	1.0	.62	.34	.11
5	.65	.44	.69	3.2	3.7	4.7	5.0	1.7	.98	.61	.28	.12
6	.62	.52	.58	2.3	3.0	4.4	4.6	1.6	1.0	.55	.27	.12
7	.56	.51	.58	1.2	2.5	4.1	4.3	1.6	1.0	.47	.24	.12
8	.63	.49	.55	1.1	2.3	3.9	4.1	1.6	.93	.44	.23	.12
9	.60	.48	.60	1.2	2.1	3.7	3.7	1.5	.77	.40	.23	.12
10	.61	.60	.65	1.1	2.0	3.6	3.4	1.4	.73	.36	.23	.12
11	.53	.69	.66	1.1	1.9	3.2	3.3	1.3	.68	.33	.23	.12
12	.42	.71	.65	1.0	1.8	3.1	3.2	1.2	.63	.32	.25	.12
13	.44	1.3	.61	.95	12	3.0	3.1	1.2	.52	.31	.25	.12
14	.49	1.1	.58	2.4	33	2.8	3.0	1.1	.54	.40	.23	.12
15	.47	.81	.58	49	7.4	3.4	2.8	1.1	.58	.51	.24	.12
16	.44	.76	.56	11	27	3.3	2.8	1.2	.69	.58	.23	.12
17	.46	.76	1.4	4.4	9.0	5.8	2.7	1.3	.76	.54	.24	.12
18	.49	.76	1.7	5.3	5.8	3.1	2.5	1.3	.76	.34	.27	.12
19	.49	.76	1.9	2.6	4.9	5.0	2.4	1.3	.69	.23	.34	.12
20	.49	.76	1.1	1.8	48	4.2	2.4	1.3	.68	.27	.32	.12
21	.49	1.5	.95	1.6	68	3.2	2.3	1.2	.67	.37	.27	.12
22	.49	2.5	.90	1.4	22	2.9	2.2	1.0	.60	.37	.22	.12
23	.47	1.4	.84	1.3	34	2.6	2.2	.93	.62	.42	.20	.12
24	.37	.99	.84	1.3	15	2.6	2.2	.88	.71	.40	.19	.12
25	.44	.92	.84	1.4	11	2.4	2.1	.98	.73	.41	.17	.12
26	.49	.46	.76	1.2	8.7	3.0	2.2	1.1	.70	.48	.16	.12
27	.49	.46	.76	1.1	7.3	127	2.2	1.1	.65	.47	.17	.12
28	.53	.79	.76	1.0	6.6	28	2.0	1.0	.60	.40	.14	.12
29	.56	.72	.76	1.4	---	30	1.9	1.0	.58	.37	.21	.20
30	.56	.65	.72	12	---	16	1.8	.99	.52	.36	.23	.22
31	.54	---	.65	55	---	9.9	---	.98	---	.48	.23	---
TOTAL	16.06	24.56	24.87	172.25	390.2	317.2	101.2	40.06	22.70	13.44	7.62	3.96
MEAN	.52	.82	.80	5.56	13.9	10.2	3.37	1.29	.76	.43	.25	.13
MAX	.65	2.5	1.9	55	68	127	8.1	1.8	1.2	.64	.42	.22
MIN	.37	.44	.55	.85	1.8	2.4	1.8	.88	.52	.23	.14	.11
AC-FT	32	49	49	342	774	629	201	79	45	27	15	7.9

CAL YR 1978 TOTAL 6543.94 MEAN 17.9 MAX 1040 MIN 0 AC-FT 12980
WTR YR 1979 TOTAL 1134.12 MEAN 3.11 MAX 127 MIN .11 AC-FT 2250

11121000 SANTA YNEZ RIVER AT JAMESON LAKE, NEAR MONTECITO, CA

LOCATION.--Lat 34°29'32", long 119°30'25", in SW¼NE¼NW¼ sec.28, T.5 N., R.25 W., Santa Barbara County, Hydrologic Unit 18060010, on upstream face of Juncal Dam, 6.5 mi (10.5 km) north of Carpinteria, and 8 mi (13 km) northeast of Montecito.

DRAINAGE AREA.--13.9 mi² (36.0 km²), excludes that of Alder Creek.

PERIOD OF RECORD.--December 1930 to current year. Prior to October 1938, published as "at Juncal Reservoir, near Montecito."

GAGE.--Two water-stage recorders. Datum of lake gage is 2,021.6 ft (616.184 m) Water and Power Resources Service datum, or 2,000 ft (609.6 m) above arbitrary datum (called sea level) generally used for work in this vicinity. Supplementary gage and sharp-crested weir on outlet conduit of lake release, at different datum.

REMARKS.--Records of total inflow represent all water reaching Jameson Lake including precipitation on the lake. Total inflow computed on basis of records of storage, diversion (draft) to the city of Montecito, spill and release to river, and evaporation and seepage. Records of net inflow exclude precipitation on lake surface. Monthly evaporation from reservoir surface computed using a coefficient that varies seasonally. Area table is based on survey made in 1961. Capacity table is based on survey made in 1969. Lake capacity at spillway level, gage height, 223.82 ft (68.220 m), 6,119 acre-ft (7.54 hm³). Dead storage, 18 acre-ft (22,200 m³), below lowest outlet at gage height 139.0 ft (42.37 m) included in these records. There is no regulation or diversion above station. At times flow of Alder Creek, which enters Santa Ynez River 2 mi (3 km) downstream from Juncal Dam, is diverted at elevation 2,250 ft (685.8 m) through a tunnel to Jameson Lake and is included in these records.

COOPERATION.--Reservoir-operation records and related data were furnished by Montecito County Water District.

AVERAGE DISCHARGE.--48 years (water years 1932-79), 6.83 ft³/s (0.193 m³/s), 4,950 acre-ft/yr (6.10 hm³/yr).

MONTHLY NET DISCHARGE, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Gage height (feet)a	Contents (acre-feet)	Change in contents (acre-feet)	Draft (acre-feet)	Spill and release (acre-feet)	Evaporation and seepage (acre-feet)	Total inflow (acre-feet)	Rain on reservoir (acre-feet)	Net inflow (acre-feet)
Sept. 30	223.05	6,010	--	--	--	--	--	--	--
Oct. 31	221.96	5,870	-140	154	0	43	57	0	57
Nov. 30	221.60	5,820	-50	127	0	13	90	40	50
Dec. 31	221.67	5,830	+10	107	0	8	125	35	90
CAL YR 1978	--	--	+1,500	999	21,984	523	25,006	729	24,277
Jan. 31	224.04	6,150	+320	94	145	7	566	89	477
Feb. 28	223.99	6,140	-10	75	1,410	9	1,484	83	1,401
Mar. 31	224.07	6,150	+10	80	1,900	18	2,008	107	1,901
Apr. 30	224.48	6,210	+60	135	643	54	892	0	892
May 31	224.47	6,210	0	214	0	69	283	0	283
June 30	223.25	6,040	-170	205	0	85	120	0	120
July 31	221.34	5,780	-260	221	0	98	59	0	59
Aug. 31	219.36	5,520	-260	201	0	79	20	0	20
Sept. 30	217.23	5,250	-270	230	0	61	21	13	8
WTR YR 1979	--	--	-760	1,843	4,098	544	5,725	367	5,358

a Gage height at 0800.

NOTE.--For months when inflow to the lake was small and other quantities were large, negative figures of inflow may appear. This arises primarily from the difficulty of computing inflow as the residual of several larger quantities, which are not susceptible to precise measurement. When this occurs, evaporation and seepage is adjusted to produce non-negative inflows.

11122000 SANTA YNEZ RIVER ABOVE GIBRALTAR DAM, NEAR SANTA BARBARA, CA

LOCATION.--Lat 34°31'34", long 119°41'08", in SW¼NW¼SW¼ sec.11, T.5 N., R.27 W., Santa Barbara County, Hydrologic Unit 18060010, on upstream face of Gibraltar Dam, 7 mi (11 km) north of Santa Barbara.

DRAINAGE AREA.--216 mi² (559 km²).

PERIOD OF RECORD.--April 1920 to current year. November 1903 to November 1918 (fragmentary) at river station at damsite; records not equivalent because records since April 1920 are based on operation of Gibraltar Reservoir, and since December 1930, Jameson Lake. Prior to October 1945, published as "Santa Ynez River near Santa Barbara."

GAGE.--Two water-stage recorders. Reservoir gage is to National Geodetic Vertical Datum of 1929. Supplementary gage and sharp-crested weir on diversion from reservoir at different datum. See WSP 1735 for history of changes on both gages prior to Oct. 1, 1955. Spill and release measured by river gaging station below dam (station 11123000).

REMARKS.--Records of total inflow represent all water reaching Gibraltar Reservoir, including precipitation on reservoir. Total inflow computed on basis of records of storage diversion (draft) to city of Santa Barbara, spill and release to river, and evaporation. Records of net inflow exclude precipitation on reservoir surface. Monthly evaporation from reservoir surface computed on basis of evaporation from Colorado land pan. Area and capacity tables are based on survey made in October 1973. Reservoir capacity at spillway level, elevation, 1,399.82 ft (426.665 m), 9,300 acre-ft (11.5 hm³). Silt level of reservoir at elevation 1,344 ft (409.7 m). Lowest outlet at elevation 1,333.86 ft (406.561 m). Flow regulated by Jameson Lake (station 11121000) since December 1930.

COOPERATION.--Reservoir-operation records and related data were furnished by city of Santa Barbara.

MONTHLY NET INFLOW, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)a	Contents (acre-feet)	Change in contents (acre-feet)	Draft (acre-feet)	Spill and release (acre-feet)	Evaporation and seepage (acre-feet)	Total inflow (acre-feet)	Rain on reservoir (acre-feet)	Net inflow (acre-feet)
Sept. 30..............	1,396.16	8,330	--	--	--	--	--	--	--
Oct. 31..............	1,394.12	7,830	-500	498	0	89	87	0	87
Nov. 30..............	1,393.83	7,750	-80	441	0	34	395	55	340
Dec. 31..............	1,395.59	8,190	+440	296	0	26	762	51	711
CAL YR 1978........	--	--	+2,030	4,056	195,120	989	202,795	1,262	201,533
Jan. 31..............	1,400.28	9,430	+1,240	56	2,620	17	3,933	189	3,744
Feb. 28..............	1,400.21	9,410	-20	213	9,560	32	9,785	141	9,644
Mar. 31..............	1,400.26	9,420	+10	368	14,640	40	15,058	169	14,889
Apr. 30..............	1,401.17	9,680	+260	761	5,800	96	6,917	0	6,917
May 31..............	1,400.94	9,610	-70	639	1,590	119	2,278	0	2,278
June 30..............	1,399.41	9,190	-420	583	148	143	454	0	454
July 31..............	1,396.23	8,350	-840	616	184	153	113	0	113
Aug. 31..............	1,393.01	7,560	-790	639	23	133	5	0	5
Sept. 30..............	1,389.74	6,790	-770	651	0	138	19	19	0
WTR YR 1979........	--	--	-1,540	5,761	34,565	1,020	39,806	624	39,182

a Elevation at 0800.

NOTE.--For months when inflow to the reservoir was small and other quantities were large, negative figures of inflow may appear. This arises primarily from the difficulty of computing inflow as the residual of several larger quantities, which are not susceptible to precise measurement. When this occurs, evaporation and seepage is adjusted to produce non-negative inflows.

11123000 SANTA YNEZ RIVER BELOW GIBRALTAR DAM, NEAR SANTA BARBARA, CA

LOCATION.--Lat 34°31'28", long 119°41'11", in NW¼SW¼SW¼ sec.11, T.5 N., R.27 W., Santa Barbara County, Hydrologic Unit 18060010, on left bank 700 ft (213 m) downstream from Gibraltar Dam, and 7 mi (11 km) north of Santa Barbara.

DRAINAGE AREA.--216 mi² (559 km²).

PERIOD OF RECORD.--April 1920 to current year (monthly discharge only prior to October 1941).

GAGE.--Two water-stage recorders. Datum of gage on main channel is 1,227 ft (374 m) National Geodetic Vertical Datum of 1929. Supplementary gage and sharp-crested weir on the release channel from Gibraltar Dam to river at different datum. See WSP 1735 for history of changes on both gages prior to May 20, 1958.

REMARKS.--Records fair. Flow regulated by Jameson Lake (station 11121000) and Gibraltar Reservoir (station 11122000). City of Santa Barbara diverted 5,760 acre-ft (7.10 hm³) during current year from Gibraltar Reservoir; Montecito County Water District diverted 1,840 acre-ft (2.27 hm³) during current year from Jameson Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 54,200 ft³/s (1,530 m³/s) Jan. 25, 1969, gage height, 25.8 ft (7.86 m), from rating curve extended above 2,100 ft³/s (59.5 m³/s) on basis of computations of flow from gate openings and flow over dam at gage heights 17.5 ft (5.33 m) and 25.8 ft (7.86 m); no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,900 ft³/s (110 m³/s), Mar. 28, gage height, 12.72 ft (3.877 m); no flow many months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	367	172	316	39	6.4	5.6	1.7	
2				0	141	122	253	38	.12	5.5	.87	
3				0	109	116	218	37	.05	5.5	.39	
4				0	113	103	149	36	0	5.5	.39	
5				0	96	96	172	35	0	4.5	.39	
6				0	85	94	164	34	0	3.9	.39	
7				0	85	88	144	32	0	3.9	.39	
8				0	87	85	131	24	0	3.9	.37	
9				0	76	81	129	24	0	3.9	.38	
10				0	58	73	119	27	0	3.9	.37	
11				0	60	65	109	28	0	3.9	.39	
12				0	60	62	102	27	0	3.2	.39	
13				0	64	60	86	24	0	2.7	.39	
14				0	858	61	82	21	0	2.7	.39	
15				15	176	61	76	18	0	2.7	.39	
16				281	147	66	68	23	0	2.7	.39	
17				213	133	103	55	25	0	2.7	.39	
18				112	91	57	59	27	0	2.7	.39	
19				55	83	71	33	27	0	2.0	.39	
20				50	111	67	1.9	27	0	1.7	.39	
21				50	456	50	2.8	27	5.1	1.7	.39	
22				42	250	51	42	28	7.6	1.9	.39	
23				30	299	47	58	29	7.6	1.9	.25	
24				43	229	42	56	26	7.6	1.9	.15	
25				51	167	41	54	24	7.6	1.9	.17	
26				41	160	45	51	22	7.6	1.7	.17	
27				29	132	1200	43	19	7.6	1.7	.16	
28				32	118	2170	36	17	6.3	1.8	.16	
29				34	---	1000	37	14	5.5	2.0	.18	
30				48	---	610	38	11	5.6	1.7	.07	
31		---		194	---	420	---	9.8	---	1.7	0	---
TOTAL	0	0	0	1320	4819	7379	2922.7	799.8	74.67	93.0	11.63	0
MEAN	0	0	0	42.6	172	238	97.4	25.8	2.49	3.00	.38	0
MAX	0	0	0	281	858	2170	316	39	7.6	5.6	1.7	0
MIN	0	0	0	0	58	41	1.9	9.8	0	1.7	0	0
AC-FT	0	0	0	2620	9560	14640	5800	1590	148	184	23	0

CAL YR 1978 TOTAL 98370.84 MEAN 270 MAX 17000 MIN 0 AC-FT 195100
WTR YR 1979 TOTAL 17419.80 MEAN 47.7 MAX 2170 MIN 0 AC-FT 34550

11123500 SANTA YNEZ RIVER BELOW LOS LAURELES CANYON, NEAR SANTA YNEZ, CA

LOCATION.--Lat 34°32'37", long 119°51'50", in San Marcos Grant, Santa Barbara County, Hydrologic Unit 18060010, on left bank 0.3 mi (0.5 km) downstream from Los Laureles Canyon Creek, 10 mi (16 km) downstream from Gibraltar Reservoir, and 13.3 mi (21.4 km) east of Santa Ynez.

DRAINAGE AREA.--277 mi² (717 km²).

PERIOD OF RECORD.--April 1947 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.--Water-stage recorder. Datum of gage is 787.8 ft (240.12 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Jameson Lake and Gibraltar Reservoir (stations 11121000, 11122000). Water diverted out of basin from these reservoirs to cities of Montecito and Santa Barbara for municipal supply. Low flow affected by intermittent pumping for irrigation from infiltration gallery in riverbed at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 67,500 ft³/s (1,910 m³/s) Jan. 25, 1969, gage height, 18.88 ft (5.755 m), from rating curve extended above 11,600 ft³/s (329 m³/s) on basis of maximum flow for station below Gibraltar Dam plus tributary inflow; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,790 ft³/s (79.0 m³/s) Mar. 28, gage height, 8.32 ft (2.536 m); no flow Aug. 8, 11, 12, Aug. 24 to Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.0	1.9	4.3	396	185	463	52	12	3.9	.11	
2	1.0	1.2	1.8	4.3	244	171	382	52	12	3.5	.05	
3	1.3	1.3	1.8	4.2	144	130	336	51	11	4.0	.05	
4	1.2	1.3	1.7	4.0	133	130	293	52	8.3	5.1	.25	
5	1.3	1.3	1.6	14	123	120	250	52	6.4	4.7	.25	
6	1.3	1.2	1.6	63	107	117	230	50	6.4	4.4	.18	
7	1.3	.77	1.6	15	95	112	216	46	5.6	3.8	.13	
8	1.3	1.0	1.6	9.3	97	108	198	45	5.4	3.2	0	
9	1.3	1.1	1.6	7.5	95	107	187	39	3.8	2.6	.07	
10	1.3	1.2	1.6	6.3	91	104	179	37	3.7	2.7	.09	
11	1.3	1.3	1.5	9.7	76	96	162	37	2.5	2.5	0	
12	1.1	1.6	1.5	5.1	82	93	155	37	1.6	1.6	0	
13	1.2	2.2	1.5	4.9	83	91	140	34	1.6	1.6	.02	
14	1.2	2.2	1.5	5.1	650	91	129	33	1.3	1.3	.03	
15	1.1	2.1	1.5	150	290	94	124	32	1.3	1.3	.05	
16	1.2	2.0	1.5	233	179	95	115	30	2.1	1.7	.07	
17	1.2	1.9	4.0	220	177	123	102	27	2.1	2.1	.07	
18	1.2	1.9	10	148	148	113	93	27	2.1	2.1	.04	
19	1.3	1.7	8.3	88	105	97	100	27	1.9	1.9	.07	
20	1.3	1.5	7.1	75	135	103	58	27	1.3	1.3	.07	
21	1.3	2.8	7.1	78	398	98	35	26	1.7	1.7	.07	
22	1.2	5.3	6.3	68	326	89	33	25	1.4	1.4	.07	
23	1.2	4.0	5.6	58	337	86	74	25	1.7	1.7	.04	
24	1.2	3.0	5.2	56	296	81	75	22	1.7	1.7	0	
25	.86	2.8	4.9	61	216	77	73	20	1.0	1.8	0	
26	1.2	2.5	4.6	66	200	77	78	19	1.6	.41	0	
27	1.2	2.3	4.6	57	188	1180	68	19	3.6	.51	0	
28	1.2	2.2	4.6	54	144	1990	53	19	5.3	.59	0	
29	1.2	2.1	4.6	54	---	1420	50	18	5.5	.51	0	
30	1.2	2.0	4.6	57	---	895	52	15	4.7	.27	0	
31	1.2	---	4.3	168	---	610	---	13	---	.05	0	---
TOTAL	37.66	58.77	111.6	1859.7	5561	8883	4503	1008	120.6	66.04	1.78	0
MEAN	1.21	1.96	3.60	60.0	199	287	150	32.5	4.02	2.13	.057	0
MAX	1.3	5.3	10	233	650	1990	463	52	12	5.1	.25	0
MIN	.86	.77	1.5	4.0	76	77	33	13	1.0	.05	0	0
AC-FT	75	117	221	3690	11030	17620	8930	2000	239	131	3.5	0

CAL YR 1978 TOTAL 129261.44 MEAN 354 MAX 19300 MIN 0 AC-FT 256400
WTR YR 1979 TOTAL 22211.15 MEAN 60.9 MAX 1990 MIN 0 AC-FT 44060

11124500 SANTA CRUZ CREEK NEAR SANTA YNEZ, CA

LOCATION.--Lat 34°35'48", long 119°54'28", in San Marcos Grant, Santa Barbara County, Hydrologic Unit 18060010, on right bank 0.6 mi (1.0 km) downstream from Pine Canyon, and 9.9 mi (15.9 km) east of Santa Ynez.

DRAINAGE AREA.--74.0 mi^2 (191.7 km^2).

PERIOD OF RECORD.--October 1941 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.--Water-stage recorder. Datum of gage is 783.38 ft (238.774 m) National Geodetic Vertical Datum of 1929. See WSP 1735 for history of changes prior to Sept. 27, 1952. Sept. 27, 1952, to June 24, 1969, at datum 3.25 ft (0.991 m) higher.

REMARKS.--Records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--38 years, 17.1 ft^3/s (0.484 m^3/s), 12,390 acre-ft/yr (15.3 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft^3/s (200 m^3/s) Feb. 24, 1969, gage height, 14.45 ft (4.404 m), from floodmark, present datum, from rating curve extended above 2,500 ft^3/s (70.8 m^3/s) on basis of slope-area measurement at gage height 14.16 ft (4.316 m); no flow at times since 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft^3/s (2.83 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 6	0715	122	3.46	8.26	2.518	Feb. 14	0315	500	14.2	9.23	2.813
Jan. 15	1515	250	7.08	8.69	2.649	Feb. 21	0415	269	7.62	8.74	2.664
Jan. 31	1830	152	4.30	8.38	2.554	Mar. 28	0500	*673	19.1	9.51	2.899

Minimum daily discharge, no flow Sept. 6-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.97	.93	3.7	4.8	62	47	110	25	11	2.3	.42	.03
2	.95	1.1	3.8	4.7	54	44	95	24	10	2.6	.39	.03
3	.93	1.2	3.7	4.6	41	41	85	23	9.6	3.2	.37	.02
4	.91	1.2	3.6	4.5	31	38	76	22	9.3	3.3	.34	.01
5	.87	1.2	3.7	14	27	36	70	22	8.9	3.2	.32	.01
6	.84	1.1	3.6	67	26	34	66	21	8.4	3.0	.30	0
7	.81	.96	3.5	25	33	32	61	21	7.9	2.8	.31	0
8	.80	.92	3.5	16	33	31	58	20	8.0	2.6	.27	0
9	.80	.91	3.5	13	31	30	57	21	7.5	2.4	.19	0
10	.76	1.0	3.5	11	30	27	52	19	6.9	2.1	.19	0
11	.68	1.6	3.5	9.9	28	26	50	18	6.4	1.9	.16	0
12	.64	2.8	3.5	9.1	26	25	47	18	5.9	1.7	.12	0
13	.56	3.3	3.5	9.1	27	25	45	17	5.7	1.6	.12	0
14	.51	4.2	3.5	9.2	204	24	44	16	5.5	1.5	.12	0
15	.49	3.2	3.5	134	63	24	41	16	5.6	1.4	.11	0
16	.51	2.8	3.5	78	47	26	40	16	5.6	1.3	.09	0
17	.62	2.7	3.8	40	37	35	39	16	5.9	1.2	.09	0
18	.68	2.5	7.2	32	29	28	38	15	6.0	1.1	.09	0
19	.75	2.5	15	26	25	28	36	15	5.8	1.0	.08	0
20	.76	2.5	9.7	21	25	29	34	14	5.4	.96	.08	0
21	.85	3.0	6.9	18	142	30	33	14	5.1	.90	.07	0
22	.92	8.5	6.4	16	78	29	32	14	4.9	.84	.06	0
23	.91	8.5	6.1	15	83	27	31	13	4.6	.78	.06	0
24	.81	5.6	6.0	14	59	25	30	13	4.3	.74	.05	0
25	.76	4.5	5.7	13	48	24	29	13	4.1	.68	.05	0
26	.81	4.2	5.6	12	43	24	28	12	3.9	.64	.05	0
27	.80	4.0	5.3	11	37	247	28	12	3.7	.60	.05	0
28	.73	3.8	5.2	11	33	393	27	12	3.1	.56	.05	0
29	.68	3.7	5.1	11	---	261	25	12	2.7	.52	.04	0
30	.75	3.6	5.1	12	---	176	25	12	2.4	.49	.04	0
31	.83	---	4.9	55	---	133	---	11	---	.45	.03	---
TOTAL	23.67	88.02	153.9	720.9	1403	1999	1432	517	184.1	48.36	4.71	.10
MEAN	.76	2.93	4.96	23.3	50.1	64.5	47.7	16.7	6.14	1.56	.15	.003
MAX	.97	8.5	15	134	204	393	110	25	11	3.3	.42	.03
MIN	.49	.91	3.5	4.5	25	24	25	11	2.4	.45	.03	0
AC-FT	47	175	305	1430	2780	3970	2840	1030	365	96	9.3	.2

CAL YR 1978 TOTAL 22516.98 MEAN 61.7 MAX 2290 MIN 0 AC-FT 44660
WTR YR 1979 TOTAL 6574.76 MEAN 18.0 MAX 393 MIN 0 AC-FT 13040

11125500 LAKE CACHUMA NEAR SANTA YNEZ, CA

LOCATION.--Lat 34°34'57", long 119°58'47", in Lomas de la Purification Grant, Santa Barbara County, Hydrologic Unit 18060010, at Bradbury Dam on Santa Ynez River, on upstream face near left end of dam, 6.1 mi (9.8 km) east of Santa Ynez.

DRAINAGE AREA.--417 mi² (1,080 km²).

PERIOD OF RECORD.--November 1952 to current year. Prior to October 1960, published as "at Cachuma Reservoir near Santa Ynez."

GAGE.--Water-stage recorder. Datum of gage is 0.00 ft (0.00 m) Water and Power Resources Service datum. Prior to Oct. 1, 1965, nonrecording gage.

REMARKS.--Reservoir is formed by earthfill dam. Storage began November 1952. Capacity table is based on surveys made in January 1953. Dead storage below outlet gage to river, elevation, 600 ft (182.9 m), 3,114 acre-ft (3.84 hm³), included in contents. Capacity below sill of inlet to Tecolote tunnel, elevation, 660 ft (201.2 m), 32,514 acre-ft (40.1 hm³), below spillway level, elevation, 720 ft (219.5 m), 125,292 acre-ft (154 hm³); below top of 4 radial gates, elevation, 750 ft (228.6 m), 204,874 acre-ft (253 hm³). Water is released from outlet to Santa Ynez River to satisfy downstream water rights. Water diverted to Tecolote tunnel for use by city of Santa Barbara, nearby communities, Santa Ynez River Water Conservation District, and to Cachuma recreation area.

COOPERATION.--Reservoir elevation, contents, and diversion figures were furnished by Water and Power Resources Service.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 221,100 acre-ft (273 hm³) Feb. 24, 1969, elevation, 755.11 ft (230.158 m); minimum since initial filling in April 1958, 105,300 acre-ft (130 hm³) Dec. 24, 25, 1977, elevation, 710.56 ft (216.579 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 207,600 acre-ft (256 hm³) Mar. 28, elevation, 750.88 ft (228.868 m); minimum, 183,900 acre-ft (227 hm³) Sept. 30, elevation, 742.97 ft (226.457 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Total diversions (acre-feet)
Sept. 30..................	746.22	193,400	--	--
Oct. 31..................	745.11	190,200	-3,200	2,100
Nov. 30..................	744.73	189,000	-1,200	1,040
Dec. 31..................	744.47	188,300	-700	976
CAL YR 1978............	--	--	+82,100	22,624
Jan. 31..................	746.46	194,100	+5,800	1,050
Feb. 28..................	750.07	205,100	+11,000	768
Mar. 31..................	750.19	205,500	+400	1,100
Apr. 30..................	749.98	204,800	-700	1,800
May 31..................	749.56	203,500	-1,300	2,910
June 30..................	748.18	199,300	-4,200	3,050
July 31..................	746.62	194,600	-4,700	3,110
Aug. 31..................	744.88	189,500	-5,100	3,220
Sept. 30..................	742.97	183,900	-5,600	3,160
WTR YR 1979............	--	--	-9,500	24,284

11128250 ALAMO PINTADO CREEK NEAR SOLVANG, CA

LOCATION.--Lat 34°37'06", long 120°07'11", in SE¼NW¼NW¼ sec.11, T.6 N., R.31 W., Santa Barbara County, Hydrologic Unit 18060010, on right bank at downstream side of bridge on Alamo Pintado Road, 1.5 mi (2.4 km) northeast of Solvang.

DRAINAGE AREA.--29.4 mi² (76.1 km²).

PERIOD OF RECORD.--October 1970 to current year. Records prior to October 1970 in files of Santa Barbara County Flood Control District.

GAGE.--Water-stage recorder. Datum of gage is 540.49 ft (164.741 m) Santa Barbara County datum.

REMARKS.--Records poor. No regulation above station. Pumping from wells along stream for irrigation.

AVERAGE DISCHARGE.--9 years, 0.41 ft³/s (0.012 m³/s), 297 acre-ft/yr (366,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 724 ft³/s (20.5 m³/s) Feb. 9, 1978, gage height, 6.80 ft (2.073 m), from floodmark, from rating curve extended above 3.0 ft³/s (0.085 m³/s) on basis of slope-area measurements at gage heights 6.00 ft (1.829 m) and 6.80 ft (2.073 m); no flow most of each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 25, 1969, reached a stage of 10.32 ft (3.146 m), from information by Santa Barbara County Flood Control District.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10 ft³/s (0.28 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 27	Unknown	*106	3.00	3.74	1.140
Mar. 29	0300	58	1.64	3.39	1.033

Minimum daily discharge, no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	0	.06	.50					
2				0	.02	0	.10					
3				0	0	0	.05					
4				0	0	0	0					
5				0	0	0	0					
6				0	0	0	0					
7				0	0	0	0					
8				0	0	0	0					
9				0	0	0	0					
10				0	0	0	0					
11				0	0	0	0					
12				0	0	0	0					
13				0	.03	0	0					
14				0	0	0	0					
15				.02	0	0	0					
16				0	.01	0	0					
17				0	0	.02	0					
18				0	0	0	0					
19				0	0	0	0					
20				0	.27	0	0					
21				0	1.2	0	0					
22				0	.33	0	0					
23				0	.06	0	0					
24				0	0	0	0					
25				0	0	0	0					
26				0	0	0	0					
27				0	0	7.0	0					
28				0	0	9.4	0					
29				0	---	18	0					
30				0	---	5.0	0					
31		---		.55	---	2.0	---		---			---
TOTAL	0	0	0	.57	1.92	41.48	.65	0	0	0	0	0
MEAN	0	0	0	.018	.069	1.34	.022	0	0	0	0	0
MAX	0	0	0	.55	1.2	18	.50	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	1.1	3.8	82	1.3	0	0	0	0	0

CAL YR 1978 TOTAL 1119.07 MEAN 3.07 MAX 316 MIN 0 AC-FT 2220
WTR YR 1979 TOTAL 44.62 MEAN .12 MAX 18 MIN 0 AC-FT 88

11128300 ALISAL RESERVOIR NEAR SOLVANG, CA

LOCATION.--Lat 34°32'56", long 120°07'45", in SE¼NE¼NW¼ sec.4, T.5 N., R.31 W., Santa Barbara County, Hydrologic Unit 18060010, in cove, on right bank 0.4 mi (0.6 km) upstream from reservoir spillway, and 3 mi (5 km) south of Solvang.

DRAINAGE AREA.--7.83 mi^2 (20.28 km^2).

PERIOD OF RECORD.--December 1971 to current year.

GAGE.--Water-stage recorder. Gage is to National Geodetic Vertical Datum of 1929.

REMARKS.--Lake is formed by earthfill dam. Storage began Dec. 19, 1970. Usable capacity, 2,260 acre-ft (2.79 hm^3) between bottom of outlet gate at elevation 555.70 ft (169.377 m) and crest of spillway at elevation 599.88 ft (182.843 m). Dead storage, 110 acre-ft (136,000 m^3). Inflow must total 150 acre-ft (185,000 m^3) during any one month between November and June in order to store flows for that water year.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 2,770 acre-ft (3.42 hm^3) Mar. 4, 1978, elevation, 604.31 ft (184.194 m); minimum, 748 acre-ft (922,000 m^3) Nov. 8-10, 1972, elevation, 577.15 ft (175.915 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 2,480 acre-ft (3.06 hm^3) Mar. 27, elevation, 601.10 ft (183.215 m); minimum, 2,230 acre-ft (2.75 hm^3) Sept. 28, elevation, 598.28 ft (182.356 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 1800, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30..............	599.75	2,360	--
Oct. 31..............	599.71	2,350	-10
Nov. 30..............	600.00	2,380	+30
Dec. 31..............	599.97	2,380	0
CAL YR 1978.........	--	--	+150
Jan. 31..............	600.60	2,430	+50
Feb. 28..............	600.07	2,390	-40
Mar. 31..............	600.18	2,400	+10
Apr. 30..............	599.97	2,380	-20
May 31..............	599.90	2,370	-10
June 30..............	599.68	2,350	-20
July 31..............	599.27	2,310	-40
Aug. 31..............	598.75	2,270	-40
Sept. 30..............	598.29	2,230	-40
WTR YR 1979.........	--	--	-130

11128500 SANTA YNEZ RIVER AT SOLVANG, CA

LOCATION.--Lat 34°35'06", long 120°08'37", in San Carlos de Jonata Grant, Santa Barbara County, Hydrologic Unit 18060010, near left bank on downstream end of pier of Alisal Road bridge, 25 ft (8 m) downstream from Alisal Creek, 0.8 mi (1.3 km) southwest of Solvang, and 10 mi (16 km) downstream from Lake Cachuma.

DRAINAGE AREA.--579 mi² (1,500 km²).

PERIOD OF RECORD.--October 1928 to November 1936, June 1937 to November 1940 (irrigation seasons only), October 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 362.43 ft (110.469 m) National Geodetic Vertical Datum of 1929. Various datums used during period of record. July 29 to Sept. 30, 1953, auxiliary water-stage recorder 750 ft (230 m) upstream at different datum. Oct. 1, 1953, to Sept. 30, 1968, water-stage recorder at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records fair. Flow regulated by Jameson Lake, Gibraltar Reservoir, and since November 1952 by Lake Cachuma (stations 11121000, 11122000, 11125500). Water diverted out of basin from Jameson Lake, Gibraltar Reservoir, and Lake Cachuma to cities of Montecito, Santa Barbara, and Goleta for municipal supply. Water for irrigation pumped from wells along banks of river in valley upstream.

EXTREMES FOR PERIOD OF RECORD (1928-36 AND SINCE 1946).--Maximum discharge, 82,000 ft³/s (2,320 m³/s), estimated, Jan. 25, 1969, gage height, 17.1 ft (5.21 m), from floodmark; no flow for several months in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,950 ft³/s (169 m³/s) Mar. 29, gage height, 4.87 ft (1.484 m); no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	3.1	4.5	3.4	109	265	757	30	2.7	1.2	.16	
2	1.1	3.1	4.3	3.6	66	266	682	28	2.7	1.2	.13	
3	1.6	3.0	4.5	8.3	49	268	490	27	2.6	1.1	.11	
4	1.7	2.7	4.6	9.1	43	245	479	23	3.8	1.1	.09	
5	1.8	2.5	4.5	13	36	183	417	25	3.8	1.0	.07	
6	1.6	2.6	4.1	20	31	131	311	26	3.2	.95	.05	
7	1.5	2.5	4.0	13	27	134	294	21	3.1	.92	.01	
8	1.5	2.7	3.7	9.2	23	175	285	15	2.7	.86	0	
9	1.2	3.4	3.6	9.9	20	263	282	11	2.8	.85	0	
10	1.1	4.3	3.4	7.8	17	236	278	10	2.8	.29	0	
11	.91	5.0	3.9	7.0	15	168	295	7.2	2.8	.32	0	
12	.84	5.1	3.7	6.7	13	121	285	4.9	2.8	.76	0	
13	.77	5.3	3.6	6.9	18	113	275	5.1	2.8	.57	0	
14	.66	5.6	3.5	8.1	52	115	191	6.3	2.8	.41	0	
15	.72	4.9	3.2	387	35	114	135	5.2	2.8	.54	0	
16	.67	4.3	2.8	105	39	117	129	4.9	2.4	.46	0	
17	.86	3.9	3.6	54	31	242	113	4.0	2.1	.42	0	
18	1.6	3.6	4.7	35	27	215	49	3.7	2.5	.53	0	
19	1.3	4.4	6.4	24	24	130	59	2.8	2.3	.51	0	
20	1.5	4.2	6.0	15	31	121	54	3.9	2.1	.46	0	
21	1.3	6.7	5.7	12	125	116	82	3.2	1.9	.45	0	
22	1.9	12	5.3	11	99	114	50	3.1	1.8	.41	0	
23	2.5	10	4.8	10	345	112	33	2.5	1.7	.42	0	
24	3.0	8.4	4.4	9.8	1070	98	22	2.3	1.7	.53	0	
25	2.4	6.8	4.3	9.6	866	68	49	2.2	1.6	1.0	0	
26	2.6	6.1	3.9	9.2	274	82	62	2.3	1.5	.70	0	
27	2.5	5.4	3.7	8.8	260	1190	36	2.3	1.5	.43	0	
28	2.8	5.0	4.0	8.4	249	4080	36	2.4	1.4	.39	0	
29	3.7	4.7	3.8	8.2	---	3670	39	2.7	1.3	.29	0	
30	3.5	4.3	3.6	30	---	1360	39	2.8	1.3	.23	0	
31	3.4	---	3.6	181	---	830	---	2.6	---	.17	0	---
TOTAL	53.63	145.6	129.7	1044.0	3994	15342	6308	292.4	71.3	19.47	.62	0
MEAN	1.73	4.85	4.18	33.7	143	495	210	9.43	2.38	.63	.020	0
MAX	3.7	12	6.4	387	1070	4080	757	30	3.8	1.2	.16	0
MIN	.66	2.5	2.8	3.4	13	68	22	2.2	1.3	.17	0	0
AC-FT	106	289	257	2070	7920	30430	12510	580	141	39	1.2	0

CAL YR 1978 TOTAL 165460.53 MEAN 453 MAX 36500 MIN 0 AC-FT 328200

WTR YR 1979 TOTAL 27400.72 MEAN 75.1 MAX 4080 MIN 0 AC-FT 54350

11129800 ZACA CREEK NEAR BUELLTON, CA

LOCATION.--Lat 34°38'55", long 120°11'00", in San Carlos de Jonata Grant, Santa Barbara County, Hydrologic Unit 18060010, on upstream end of center pier of bridge on frontage road, 0.9 mi (1.4 km) upstream from Dry Creek, 2.4 mi (3.9 km) north of Buellton, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--32.8 mi² (85.0 km²).

PERIOD OF RECORD.--September 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 471.54 ft (143.725 m) National Geodetic Vertical Datum of 1929.

REMARKS.-- Records fair. Some pumping from wells along stream for irrigation above station.

AVERAGE DISCHARGE.--16 years, 1.05 ft³/s (0.030 m³/s), 761 acre-ft/yr (938,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,390 ft³/s (39.4 m³/s) Feb. 24, 1969, gage height, 9.20 ft (2.804 m); maximum gage height, 9.66 ft (2.944 m) Mar. 4, 1978; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 28 ft³/s (0.79 m³/s) Mar. 29, gage height, 2.99 ft (0.911 m), no peak above base of 50 ft³/s (1.42 m³/s); minimum daily, no flow many months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	0	.40	1.5	4.0	.02				
2		0	0	0	.23	1.1	2.9	.01				
3		0	0	0	.18	.31	2.0	.01				
4		0	0	0	.05	.19	1.2	.01				
5		0	0	.07	.05	.15	.97	.01				
6		0	0	.02	.04	.11	.54	0				
7		0	0	0	.04	.10	.50	0				
8		0	0	0	.04	.09	.35	0				
9		0	0	.01	.04	.07	.28	0				
10		0	0	0	.04	.06	.24	0				
11		0	0	0	.03	.05	.18	0				
12		0	0	0	.03	.05	.15	0				
13		0	0	0	.37	.05	.14	0				
14		0	0	0	.81	.05	.11	0				
15		0	0	1.3	.05	.10	.09	0				
16		0	0	.70	.69	.44	.08	0				
17		0	0	.15	.08	.52	.07	0				
18		0	0	.65	.05	.23	.05	0				
19		0	.02	.07	.05	.51	.05	0				
20		0	0	.05	1.3	.30	.05	0				
21		0	0	.04	6.1	.18	.05	0				
22		.03	0	.04	1.8	.14	.04	0				
23		0	0	.04	2.3	.11	.04	0				
24		0	0	.04	.92	.09	.04	0				
25		0	0	.03	.72	.08	.03	0				
26		0	0	.03	.45	.17	.03	0				
27		0	0	.03	.35	8.0	.03	0				
28		0	0	.03	.30	9.2	.03	0				
29		0	0	.03	---	18	.02	0				
30		0	0	.04	---	9.1	.02	0				
31		---	0	1.2	---	5.5	---	0	---			---
TOTAL	0	.03	.02	4.57	17.51	56.55	14.28	.06	0	0	0	0
MEAN	0	.001	.0006	.15	.63	1.82	.48	.002	0	0	0	0
MAX	0	.03	.02	1.3	6.1	18	4.0	.02	0	0	0	0
MIN	0	0	0	0	.03	.05	.02	0	0	0	0	0
AC-FT	0	.06	.04	9.1	35	112	28	.1	0	0	0	0

CAL YR 1978 TOTAL 1859.33 MEAN 5.09 MAX 368 MIN 0 AC-FT 3690
WTR YR 1979 TOTAL 93.02 MEAN .25 MAX 18 MIN 0 AC-FT 185

11132500 SALSIPUEDES CREEK NEAR LOMPOC, CA

LOCATION.--Lat 34°35'19", long 120°24'27", in W½ sec.24, T.6 N., R.34 W., Santa Barbara County, Hydrologic Unit 18060010, on right bank at bridge on Jalama Road, 0.4 mi (0.6 km) downstream from El Jaro Creek, and 4.4 mi (7.1 km) southeast of Lompoc.

DRAINAGE AREA.--47.1 mi² (122.0 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1941 to current year.

GAGE.--Water-stage recorder and concrete low-water control. Altitude of gage is 220 ft (67 m), from topographic map.

REMARKS.--Records good, except those below 5 ft³/s (0.1 m³/s), which are fair. No regulation above station. Small diversions for irrigation above station.

AVERAGE DISCHARGE.--38 years, 9.55 ft³/s (0.270 m³/s), 6,920 acre-ft/yr (8.53 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s (323 m³/s) Mar. 15, 1952, gage height, 20.8 ft (6.34 m); no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 15	0530	1,010	28.6	4.36	1.329	Mar. 27	0245	*3,290	93.2	8.68	2.646
Feb. 20	2345	1,560	44.2	5.40	1.646						

Minimum daily discharge, 0.81 ft³/s (0.023 m³/s) Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	3.0	3.5	3.7	33	41	32	9.1	5.1	3.5	2.2	1.7
2	2.0	3.0	3.4	3.8	38	22	28	9.1	5.3	3.7	2.4	1.9
3	2.2	3.0	3.2	3.7	22	19	26	8.7	5.3	3.8	2.5	1.8
4	2.2	3.1	3.1	3.7	16	18	23	8.8	5.3	3.7	2.5	1.8
5	2.1	3.1	3.3	12	13	16	22	8.5	5.3	3.7	2.6	1.8
6	2.0	3.1	3.1	9.2	11	15	21	7.9	5.3	3.7	2.5	1.7
7	2.0	3.0	3.1	5.2	10	15	19	7.6	5.3	3.7	2.5	1.6
8	2.2	2.8	3.1	4.6	9.8	14	18	7.6	5.1	3.4	2.5	1.6
9	2.2	2.9	3.1	5.5	9.2	14	17	7.6	4.8	3.4	2.8	1.5
10	2.2	3.1	3.4	5.8	9.1	13	16	7.4	4.4	3.1	2.8	1.5
11	1.9	3.5	3.4	4.8	8.6	13	16	7.1	4.3	3.1	3.1	1.3
12	2.2	3.8	3.4	4.7	8.4	13	15	6.8	4.2	3.1	3.1	1.3
13	2.2	5.8	3.4	4.6	21	12	15	6.5	4.1	2.8	3.1	1.3
14	2.2	4.7	3.4	8.3	59	12	14	6.1	4.3	2.8	3.1	1.3
15	1.9	3.6	3.4	171	16	14	14	6.1	4.2	3.1	3.1	1.2
16	2.2	3.2	3.5	38	82	17	13	6.1	4.2	3.1	3.1	1.1
17	2.8	3.0	5.2	14	22	25	12	6.1	4.0	2.8	3.1	1.1
18	2.5	2.9	6.4	17	16	14	11	6.1	3.9	2.8	3.1	.97
19	2.8	3.1	7.4	9.2	15	33	11	6.6	3.8	2.8	3.1	.81
20	3.1	3.1	4.6	7.3	110	20	11	6.6	3.7	2.8	2.5	.90
21	3.1	5.6	3.8	6.7	182	15	11	6.6	3.7	2.8	2.2	.99
22	3.1	8.7	3.7	6.2	110	13	11	6.6	3.6	2.8	2.2	1.1
23	2.7	5.3	3.7	5.8	111	12	11	6.6	3.7	2.8	2.2	1.2
24	2.7	3.8	3.6	5.7	40	12	11	6.6	3.9	2.8	2.2	1.1
25	3.1	3.4	3.7	5.8	31	12	11	6.6	3.9	2.5	1.9	1.1
26	3.1	3.3	3.7	5.3	27	16	11	6.3	3.9	2.5	1.7	1.1
27	3.1	3.3	3.7	5.1	23	563	11	5.3	3.6	2.5	1.7	1.2
28	3.4	3.1	3.7	6.4	21	114	9.4	5.4	3.6	2.5	1.7	1.2
29	3.1	3.2	3.7	5.5	---	116	9.1	5.1	3.5	2.5	1.7	2.0
30	3.1	3.3	3.7	39	---	49	9.1	4.9	3.3	2.5	1.7	2.2
31	3.1	---	3.7	115	---	38	---	5.1	---	2.2	1.7	---
TOTAL	78.2	109.8	117.1	532.8	1074.1	1320	456.6	211.5	128.6	93.3	76.6	41.37
MEAN	2.52	3.66	3.78	17.2	38.4	42.6	15.3	6.82	4.29	3.01	2.47	1.38
MAX	3.4	8.7	7.4	171	182	563	32	9.1	5.3	3.8	3.1	2.2
MIN	1.7	2.8	3.1	3.7	8.4	12	9.1	4.9	3.3	2.2	1.7	.81
AC-FT	155	218	232	1060	2130	2620	910	420	255	185	152	82

CAL YR 1978 TOTAL 18553.26 MEAN 50.8 MAX 2330 MIN .21 AC-FT 36800
WTR YR 1979 TOTAL 4241.97 MEAN 11.6 MAX 563 MIN .81 AC-FT 8410

11132500 SALSIPUEDES CREEK NEAR LOMPOC, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1977 to current year.
CHEMICAL ANALYSES: October 1977 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT						
02...	0830	1.3	1390	7.8	17.5	933
NOV						
01...	1010	3.2	1420	8.0	14.0	933
DEC						
01...	1000	3.5	1400	7.6	11.5	948
JAN						
02...	1130	3.5	1400	7.9	8.5	944
FEB						
01...	1200	27	1020	--	9.5	683
MAR						
01...	1255	44	1020	8.0	12.0	700
APR						
02...	1410	29	1310	8.3	17.0	924
MAY						
02...	1450	9.4	1360	8.1	20.0	887
JUN						
04...	1315	6.5	1240	8.0	22.0	844
JUL						
02...	1145	3.0	1300	7.7	16.5	844
AUG						
01...	1445	2.3	1280	8.0	24.5	886
SEP						
05...	1545	1.7	1350	7.9	23.5	902

11133500 SANTA YNEZ RIVER NEAR LOMPOC, CA

LOCATION.--Lat 34°38'30", long 120°25'50", near boundary of La Mission Vieja de la Purisima Grant, Santa Barbara County, Hydrologic Unit 18060010, on downstream side of Robinson Bridge on State Highway 246, 1.5 mi (2.4 km) east of Lompoc, 2.5 mi (4.0 km) downstream from Salsipuedes Creek, and 13.1 mi (21.1 km) downstream from Lake Cachuma.

DRAINAGE AREA.--790 mi² (2,050 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November to December 1906, October 1907 to September 1918, April 1925 to September 1960, October 1978 to present. Records equivalent, except for low-flow periods, to those published as "at Narrows" (station 11133000) May 1947 to November 1951 (irrigation seasons only), May 1952 to September 1963, October 1964 to September 1978.

GAGE.--Water-stage recorder. Datum of gage is 79.25 ft (24.155 m) National Geodetic Vertical Datum of 1929. See WSP 1715 for history of changes prior to September 1960.

REMARKS.--Records good. Flow regulated by Jameson Lake, Gibraltar Reservoir, and since 1952 by Lake Cachuma (stations 11121000, 11122000, 11125500). Water diverted out of Jameson Lake, Gibraltar Reservoir, and Lake Cachuma to cities of Montecito, Santa Barbara, and Goleta for municipal supply. Water pumped from wells along banks of river for irrigation in valley upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 80,000 ft³/s (2,270 m³/s) Jan. 25, 1969, gage height, 24.20 ft (7.376 m), gage was supplementary to station 11133000 at this time; no flow at times in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 9, 1907, 120,000 ft³/s (3,400 m³/s), gage height, 22.0 ft (6.71 m) from floodmarks, site and datum then in use, from mean-depth study.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,280 ft³/s (178 m³/s) Mar. 27, 1979, gage height, 9.42 ft (2.87 m); no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.76	4.3	14	17	336	402	993	84	13	3.1	.52	
2	.80	4.3	14	17	194	387	844	76	13	3.4	.50	
3	.80	4.3	13	18	149	379	633	72	13	2.4	.50	
4	.90	4.3	13	18	112	357	513	68	13	2.4	.48	
5	.90	4.3	14	29	90	315	495	63	12	2.4	.48	
6	.90	4.3	14	36	76	235	402	59	12	2.4	.46	
7	.90	4.3	14	29	68	194	328	55	10	2.4	.30	
8	.90	4.3	14	30	61	184	321	51	10	2.4	.14	
9	.90	4.3	14	30	55	230	335	47	9.6	2.4	0	
10	.90	4.3	14	27	52	282	328	42	9.2	2.2	0	
11	.90	6.0	14	26	50	246	328	38	8.5	1.6	0	
12	.90	7.2	14	26	48	199	328	36	6.9	1.6	0	
13	.90	10	14	25	50	166	335	34	5.9	1.4	0	
14	.90	5.0	14	31	135	153	301	33	5.3	1.4	0	
15	.90	5.0	15	570	90	149	204	31	4.3	1.6	0	
16	1.0	5.0	15	377	172	153	184	29	4.6	1.9	0	
17	1.4	5.0	17	149	105	264	189	27	5.0	1.4	0	
18	1.9	5.0	23	102	78	269	153	26	5.0	1.2	0	
19	1.9	5.0	26	63	78	242	119	24	3.9	1.2	0	
20	2.5	7.0	20	41	79	219	112	22	3.6	1.2	0	
21	2.5	8.2	17	38	512	175	115	20	3.6	1.2	0	
22	2.5	14	17	34	235	153	126	19	3.4	1.2	0	
23	3.2	17	17	34	427	153	99	17	3.6	1.4	0	
24	3.2	11	17	34	858	149	78	15	3.9	1.2	0	
25	3.2	11	17	34	1490	145	68	15	3.9	.52	0	
26	3.2	11	17	31	633	133	112	15	3.6	.52	0	
27	3.2	11	17	29	308	1780	115	15	3.6	.74	0	
28	3.2	11	17	31	315	2720	96	14	3.4	.52	0	
29	4.0	11	17	31	---	3580	99	14	2.9	.52	0	
30	4.0	12	17	37	---	1830	92	14	2.9	.52	0	
31	4.0	---	17	109	---	1120	---	14	---	.52	0	---
TOTAL	58.06	220.4	497	2103	6856	17023	8445	1089	202.6	48.86	3.38	0
MEAN	1.87	7.35	16.0	67.8	245	549	282	35.1	6.75	1.58	.11	0
MAX	4.0	17	26	570	1490	3580	993	84	13	3.4	.52	0
MIN	.76	4.3	13	17	48	133	68	14	2.9	.52	0	0
AC-FT	115	437	986	4170	13600	33770	16750	2160	402	97	6.7	0

WTR YR 1979 TOTAL 36626.30 MEAN 100 MAX 3580 MIN 0 AC-FT 72650

11133500 SANTA YNEZ RIVER NEAR LOMPOC, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1978 to current year.
CHEMICAL ANALYSES: May 1978 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT						
02...	1000	.75	1500	7.9	19.0	1150
20...	1100	2.5	1660	7.9	16.5	1160
NOV						
21...	0930	9.4	1560	7.6	14.0	1210
JAN						
02...	1030	17	1690	7.8	9.5	1250
FEB						
01...	0900	352	560	7.2	9.0	442
MAR						
01...	1055	434	1000	8.1	12.5	791
APR						
02...	1130	836	925	8.2	15.0	642
MAY						
02...	0915	76	1200	8.0	15.0	906
JUN						
04...	0925	13	1430	8.0	17.5	1070
JUL						
02...	0940	3.6	1480	7.6	16.5	1050
AUG						
01...	1230	.52	1400	7.8	29.5	1110

11134800 MIGUELITO CREEK AT LOMPOC, CA

LOCATION.--Lat 34°37'57", long 120°27'51", in Lompoc Grant, Santa Barbara County, Hydrologic Unit 18060010, on right bank at upstream end of debris dam, and 1,500 ft (460 m) south of Lompoc Union High School.

DRAINAGE AREA.--11.6 mi² (30.0 km²).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 97.94 ft (29.852 m) Santa Barbara County Flood Control District datum.

REMARKS.--Records good except those below 10 ft³/s (0.28 m³/s) which are poor. No regulation or diversion above station; some pumping from wells along stream for irrigation.

AVERAGE DISCHARGE.--9 years, 1.50 ft³/s (0.042 m³/s), 1,090 acre-ft/yr (1.34 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 538 ft³/s (15.2 m³/s) Mar. 4, 1978, gage height, 5.17 ft (1.576 m), from rating curve extended above 280 ft³/s (7.93 m³/s) on basis of slope-area measurement at gage height 4.34 ft (1.323 m); maximum gage height, 5.34 ft (1.628 m) Feb. 2, 1975; no flow many days in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 25, 1969, reached a stage of 5.83 ft (1.777 m), from floodmark, discharge, 680 ft³/s (19.3 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 15	0330	158	4.47	3.02	0.920	Feb. 22	2145	122	3.46	2.77	0.844
Feb. 20	2215	129	3.65	2.82	0.860	Mar. 27	0045	*310	8.78	3.98	1.213

Minimum daily discharge, 0.32 ft³/s (0.009 m³/s) Aug. 27, Sept. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.69	.68	1.1	1.1	3.5	4.2	3.5	.95	1.0	.72	.52	.38
2	.65	.72	.96	1.2	6.9	2.0	3.4	.98	1.0	.71	.55	.37
3	.65	.70	.95	1.2	2.9	1.9	2.7	1.1	.99	.71	.56	.43
4	.65	.72	.96	1.2	2.0	1.8	2.5	1.1	.98	.75	.50	.39
5	.69	.73	.96	2.5	1.8	1.7	2.3	1.1	.97	.92	.51	.43
6	.65	.68	.91	1.5	1.5	1.7	2.3	1.1	.96	.70	.50	.41
7	.59	.66	.89	1.4	1.5	1.6	1.9	1.1	.95	.69	.47	.37
8	.69	.69	.76	1.5	1.8	1.6	1.7	1.2	.94	.62	.46	.35
9	.60	.75	.85	1.9	1.8	1.5	1.6	1.2	1.2	.63	.50	.36
10	.61	.64	.78	1.8	1.8	1.5	1.7	1.1	1.2	.58	.54	.36
11	.72	.63	.76	1.9	1.8	1.4	1.7	1.3	1.1	.62	.52	.33
12	.73	.61	.81	1.9	1.5	1.4	1.6	1.3	1.0	.60	.51	.32
13	.62	1.2	.85	2.0	4.2	1.3	1.6	1.3	.91	.59	.49	.32
14	.69	.87	.80	5.1	3.3	1.3	1.5	1.3	.88	.60	.46	.41
15	.61	.88	.80	18	1.3	1.3	1.6	1.2	.95	.67	.50	.41
16	.65	.86	.81	2.5	5.3	7.9	1.5	1.2	1.0	.71	.52	.41
17	.52	.82	1.1	1.9	2.0	4.2	1.3	1.2	1.0	.70	.54	.41
18	.60	.78	1.5	2.6	1.8	3.0	1.2	1.2	1.1	.72	.60	.41
19	.67	.78	2.0	1.5	1.8	9.5	1.2	1.2	.96	.68	.60	.41
20	.72	.80	.97	1.2	11	5.0	1.2	1.2	.74	.69	.52	.41
21	.82	1.4	.91	1.2	8.0	3.0	1.2	1.1	.73	.55	.50	.41
22	.83	1.4	.91	1.1	9.0	1.8	1.2	1.1	.74	.64	.49	.41
23	.82	.95	.91	1.0	6.5	1.3	1.1	1.1	.68	.57	.43	.41
24	.80	.95	.86	1.1	4.5	1.3	1.1	1.1	.78	.52	.40	.41
25	.90	.93	1.0	1.1	3.4	1.1	1.1	1.1	.81	.42	.37	.40
26	.67	.76	1.0	.88	2.6	4.2	.99	1.1	.80	.47	.36	.40
27	.90	.76	.98	.85	2.1	37	.85	1.1	.70	.41	.32	.40
28	.80	.86	1.0	1.1	1.8	19	1.0	1.1	.67	.44	.34	.40
29	.74	.93	1.1	1.0	---	12	1.1	1.0	.68	.43	.39	.50
30	.74	.95	1.0	5.4	---	4.8	1.1	1.0	.71	.41	.43	.52
31	.74	---	1.1	8.6	---	3.6	---	1.0	---	.45	.43	---
TOTAL	21.90	24.96	30.30	77.23	97.4	144.9	48.74	35.13	27.25	18.60	14.83	11.95
MEAN	.71	.83	.98	2.49	3.48	4.67	1.62	1.13	.91	.60	.48	.40
MAX	.90	1.4	2.0	18	11	37	3.5	1.3	1.2	.92	.60	.52
MIN	.52	.61	.76	.85	1.3	1.1	.85	.95	.67	.41	.32	.32
AC-FT	43	50	60	153	193	287	97	70	54	37	29	24

CAL YR 1978 TOTAL 1917.42 MEAN 5.25 MAX 183 MIN 0 AC-FT 3800
WTR YR 1979 TOTAL 553.19 MEAN 1.52 MAX 37 MIN .32 AC-FT 1100

11135000 SANTA YNEZ RIVER AT PINE CANYON, NEAR LOMPOC, CA

LOCATION.--Lat 34°40'20", long 120°29'30", in Lompoc Grant, Santa Barbara County, Hydrologic Unit 18060010, on right bank at Floradale Avenue bridge, 2.1 mi (3.4 km) upstream from Santa Lucia Creek, 3 mi (5 km) northwest of Lompoc, and 7 mi (11 km) upstream from mouth at Pacific Ocean.

DRAINAGE AREA.--844 mi² (2,186 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1941 to October 1946, August 1964 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.--Water-stage recorder. Datum of gage is 40.78 ft (12.430 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 24, 1964, at different datum. Aug. 24, 1964, to Aug. 20, 1970, at datum 0.91 ft (0.277 m) lower.

REMARKS.--Records good, except those for July 20 to Sept. 30, which are poor. Flow regulated by Jameson Lake, Gibraltar Reservoir, and Lake Cachuma (stations 11121000, 11122000, 11125500). Water diverted out of basin from Jameson Lake, Gibraltar Reservoir, and Lake Cachuma to cities of Montecito, Santa Barbara, and Goleta for municipal supply. Water pumped from wells along bank for irrigation in valley upstream. Effluent from city of Lompoc contributes to low flow most months.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 78,000 ft³/s (2,210 m³/s), estimated, Jan. 25, 1969, gage height, 24.91 ft (7.593 m), present datum, from floodmark; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,770 ft³/s (192 m³/s) Mar. 28, gage height, 7.24 ft (2.207 m); minimum daily, 2.2 ft³/s (0.062 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	3.2	7.5	5.1	375	410	977	72	7.6	5.0	4.6	3.5
2	2.5	3.3	6.2	5.4	236	350	936	71	7.2	5.4	4.6	3.4
3	2.4	3.3	4.4	5.2	154	330	807	62	6.5	5.7	4.5	3.4
4	2.3	3.4	4.6	5.0	108	315	760	57	5.8	6.0	4.5	3.4
5	2.7	3.6	2.9	22	83	280	600	52	5.4	6.1	4.4	3.4
6	2.3	3.8	5.1	8.9	67	210	450	49	4.9	6.0	4.4	3.4
7	2.5	3.7	4.0	5.5	55	165	381	48	4.3	6.6	4.3	3.3
8	2.4	3.9	4.2	5.8	49	165	354	45	4.4	5.9	4.2	3.3
9	2.7	3.9	4.3	5.8	45	200	339	41	4.1	5.8	4.2	3.3
10	3.0	3.9	4.4	5.6	42	250	322	33	4.0	5.5	4.2	3.3
11	4.6	4.5	4.6	5.5	38	220	320	28	4.8	5.2	4.1	3.3
12	5.0	6.7	4.5	5.5	36	175	311	26	4.3	5.3	4.1	3.2
13	4.3	11	4.4	5.4	53	148	311	25	4.4	5.4	4.0	3.2
14	2.8	3.3	4.6	49	119	137	303	24	3.8	5.0	4.0	3.2
15	2.7	2.8	4.7	765	76	142	220	23	4.8	5.0	3.9	3.2
16	2.7	3.0	5.3	638	174	167	206	20	5.5	5.4	3.9	3.2
17	2.5	3.0	8.6	256	102	239	199	20	6.3	5.4	3.9	3.2
18	2.4	3.0	11	201	63	275	176	19	5.2	5.2	3.8	3.2
19	3.0	3.0	24	129	52	270	128	17	5.2	5.6	3.8	3.2
20	2.4	3.0	6.2	88	84	205	120	15	5.0	5.6	3.8	3.1
21	2.4	3.2	5.6	67	461	155	113	15	5.2	5.5	3.7	3.1
22	2.4	7.0	5.6	53	280	145	131	15	5.4	5.4	3.7	3.1
23	2.8	14	5.5	36	447	137	107	13	5.3	5.3	3.7	3.1
24	3.0	5.0	5.4	30	659	132	87	11	5.1	5.2	3.6	3.1
25	3.0	3.4	5.2	27	1290	122	73	12	5.4	5.1	3.6	3.1
26	3.0	3.5	5.4	20	661	115	88	11	5.4	5.0	3.6	3.1
27	3.0	3.5	5.4	17	325	1600	94	11	5.2	5.0	3.6	3.1
28	3.1	3.5	5.5	34	348	3180	87	11	5.0	4.9	3.5	3.1
29	3.1	4.9	5.3	35	---	4880	82	9.8	5.2	4.8	3.5	3.0
30	3.2	3.9	5.0	55	---	1900	76	9.4	5.2	4.8	3.5	3.0
31	3.3	---	5.2	226	---	1210	---	8.6	---	4.7	3.5	---
TOTAL	89.7	131.2	184.6	2816.7	6482	18309	9156	873.8	155.9	167.6	122.7	96.5
MEAN	2.89	4.37	5.95	90.9	232	591	305	28.2	5.20	5.41	3.96	3.22
MAX	5.0	14	24	765	1290	4880	977	72	7.6	6.6	4.6	3.5
MIN	2.2	2.8	2.9	5.0	36	115	73	8.6	3.8	4.7	3.5	3.0
AC-FT	178	260	366	5590	12860	36320	18160	1730	309	332	243	191

CAL YR 1978 TOTAL 201068.7 MEAN 551 MAX 33500 MIN 1.0 AC-FT 398800
WTR YR 1979 TOTAL 38505.7 MEAN 106 MAX 4880 MIN 2.2 AC-FT 76530

11135000 SANTA YNEZ RIVER AT PINE CANYON, NEAR LOMPOC, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1977 to current year.
CHEMICAL ANALYSES: October 1977 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT						
10...	0850	1.0	2100	7.5	19.5	1270
23...	0940	.91	2150	7.4	17.0	1310
NOV						
28...	0835	1.7	1860	6.9	10.5	1290
DEC						
20...	0840	3.2	1940	7.2	10.0	1230
JAN						
29...	0845	33	1530	7.4	5.5	1100
FEB						
28...	1130	360	1040	8.1	14.5	717
APR						
06...	0920	452	1060	8.2	17.0	730
MAY						
02...	1110	71	1440	7.9	20.5	975
JUN						
04...	1030	6.5	1920	7.2	21.0	1270
JUL						
03...	1015	6.0	1750	7.1	20.0	1120
AUG						
01...	0920	4.7	1670	7.3	19.5	1130
SEP						
05...	1040	1.2	1830	7.1	22.0	1220

11135800 SAN ANTONIO CREEK AT LOS ALAMOS, CA

LOCATION.--Lat 34°44'30", long 120°16'12", in Los Alamos Grant, Santa Barbara County, Hydrologic Unit 18060009, on left bank 100 ft (30 m) upstream from bridge on northbound lane of Highway 101 at Los Alamos.

DRAINAGE AREA.--34.9 mi² (90.4 km²).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 580 ft (177 m), from topographic map.

REMARKS.--Records fair. No regulation above station. Pumping for irrigation of about 1,000 acres (4.05 km²) above station.

AVERAGE DISCHARGE.--9 years, 1.11 ft³/s (0.031 m³/s), 804 acre-ft/yr (991,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,270 ft³/s (36.0 m³/s) Feb. 10, 1978, gage height, 9.58 ft (2.920 m), from rating curve extended above 100 ft³/s (2.83 m³/s) on basis of slope-area measurement of peak flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 102 ft³/s (2.89 m³/s) Mar. 28 (0300 hrs), gage height, 2.53 ft (0.771 m), no other peak above base of 30 ft³/s (0.85 m³/s); no flow for many months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	.02	1.2	.55	1.5					
2		0	0	.02	1.2	.23	.09					
3		0	0	.02	.71	.11	.06					
4		0	0	.01	.28	.06	.05					
5		0	0	.23	.15	.06	.05					
6		0	0	.09	.09	.06	.05					
7		0	0	.06	.11	.06	.05					
8		0	0	.05	.11	.05	.04					
9		0	0	.04	.10	.05	.03					
10		0	0	.04	.14	.05	.03					
11		0	0	.04	.08	.05	.04					
12		0	0	.04	.06	.05	.04					
13		0	0	.04	.19	.05	.04					
14		0	0	.07	.28	.05	.01					
15		0	0	1.5	.35	.06	0					
16		0	.02	.88	.99	.09	0					
17		0	.06	.32	.31	.27	0					
18		.05	.48	.87	.16	.12	0					
19		.01	.80	.38	.07	.47	0					
20		0	.16	.19	.52	.56	0					
21		0	.05	.15	5.4	.19	0					
22		0	.04	.11	1.5	.11	0					
23		0	.03	.05	1.3	.06	0					
24		0	.03	.05	.25	.05	0					
25		0	.02	.05	.16	.05	0					
26		0	.03	.05	.16	.14	0					
27		0	.04	.04	.11	18	0					
28		0	.04	.04	.09	36	0					
29		0	.02	.04	---	44	0					
30		0	.02	.32	---	18	0					
31		---	.01	1.3	---	4.7	---		---			---
TOTAL	0	.06	1.85	7.03	16.07	124.34	2.08	0	0	0	0	0
MEAN	0	.002	.060	.23	.57	4.01	.069	0	0	0	0	0
MAX	0	.05	.80	1.5	5.4	44	1.5	0	0	0	0	0
MIN	0	0	0	.01	.06	.05	0	0	0	0	0	0
AC-FT	0	.1	3.7	14	32	247	4.1	0	0	0	0	0

CAL YR 1978 TOTAL 2882.52 MEAN 7.90 MAX 680 MIN 0 AC-FT 5720
WTR YR 1979 TOTAL 151.43 MEAN .41 MAX 44 MIN 0 AC-FT 300

11136100 SAN ANTONIO CREEK NEAR CASMALIA, CA

LOCATION.--Lat 34°46'56", long 120°31'47", in Jesus Maria Grant, Santa Barbara County, Hydrologic Unit 18060009, on Vandenberg Military Reservation on downstream side of center pile bent of San Antonio Road bridge, 0.7 mi (1.1 km) east of junction of San Antonio Road and Lompoc-Casmalia Road, and 3.8 mi (6.1 km) south of Casmalia.

DRAINAGE AREA.--135 mi² (350 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Concrete control since August 1970. Altitude of gage is 160 ft (49 m), from topographic map. Prior to June 27, 1958, at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records good. No regulation above station. Flow affected by pumping from wells along stream for irrigation above station.

AVERAGE DISCHARGE.--24 years, 5.59 ft³/s (0.158 m³/s), 4,050 acre-ft/yr (4.99 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,440 ft³/s (97.4 m³/s) Mar. 4, 1978, gage height, 13.22 ft (4.029 m), from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of slope-area measurement at gage height 12.93 ft (3.941 m); minimum daily, 0.10 ft³/s (0.003 m³/s) June 19, 20, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 21	0530	122	3.46	6.08	1.853
Mar. 28	0615	*268	7.59	6.90	2.103

Minimum daily discharge, 0.43 ft³/s (0.012 m³/s) July 15, 17, 18, Aug. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.47	.52	.88	1.1	16	6.2	9.9	1.0	.59	.50	.50	.58
2	.52	.52	.93	1.1	15	5.0	6.0	1.0	.62	.53	.50	.53
3	.52	.53	.93	1.1	19	3.3	4.6	1.0	.67	.54	.43	.52
4	.47	.53	.87	1.1	4.5	2.9	3.7	.95	.67	.54	.47	.52
5	.47	.56	.89	1.3	3.2	2.6	3.1	.95	.67	.53	.47	.51
6	.47	.57	.86	1.6	3.5	2.4	2.8	1.1	.66	.53	.48	.50
7	.52	.56	.82	1.4	3.1	2.4	2.6	.93	.66	.53	.46	.53
8	.52	.55	.82	1.3	2.9	3.9	2.4	.92	.62	.51	.58	.55
9	.47	.59	.82	1.6	1.9	3.9	2.2	.88	.59	.51	.49	.54
10	.47	.59	.85	1.6	1.7	3.3	2.1	.86	.56	.50	.49	.55
11	.47	.77	.89	1.4	2.8	2.2	2.0	.80	.56	.49	.48	.54
12	.47	.73	.92	1.4	2.0	2.0	1.9	.72	.54	.48	.48	.51
13	.44	1.1	.92	1.3	2.3	1.9	1.8	.69	.52	.47	.48	.52
14	.49	1.0	.97	2.1	9.7	1.9	1.8	.72	.53	.49	.47	.53
15	.49	.86	1.0	31	4.1	2.2	1.7	.76	.52	.43	.50	.53
16	.47	.74	1.0	27	4.5	2.8	1.7	.71	.53	.44	.56	.53
17	.44	.77	1.1	7.3	5.2	5.0	1.6	.73	.53	.43	.57	.54
18	.44	.71	1.7	18	2.5	4.2	1.6	.75	.52	.43	.54	.53
19	.45	.71	3.9	9.7	2.0	11	1.5	.72	.52	.45	.56	.54
20	.44	.72	2.3	3.2	3.2	10	1.5	.73	.53	.45	.57	.56
21	.44	.92	1.6	2.2	57	5.0	1.4	.66	.54	.46	.58	.54
22	.50	1.3	1.4	1.8	17	3.6	1.4	.71	.53	.46	.58	.51
23	.49	1.3	1.3	1.6	11	2.9	1.3	.70	.53	.45	.58	.49
24	.47	1.1	1.2	1.5	5.4	2.6	1.3	.68	.54	.45	.57	.47
25	.47	.92	1.2	2.3	3.6	2.5	1.2	.69	.54	.45	.58	.47
26	.49	.86	1.2	2.3	3.0	2.4	1.2	.66	.53	.49	.58	.49
27	.55	.81	1.2	1.5	2.7	62	1.2	.70	.51	.50	.56	.50
28	.50	.78	1.2	3.2	2.6	161	1.1	.72	.51	.48	.54	.51
29	.49	.78	1.2	3.1	---	137	1.1	.65	.50	.61	.55	.65
30	.55	.77	1.2	2.1	---	43	1.1	.56	.50	.49	.56	.56
31	.45	---	1.1	6.6	---	22	---	.62	---	.48	.55	---
TOTAL	14.90	23.22	37.15	143.8	211.4	523.1	68.8	24.27	16.84	15.10	16.31	15.85
MEAN	.48	.77	1.20	4.64	7.55	16.9	2.29	.78	.56	.49	.53	.53
MAX	.55	1.3	3.9	31	57	161	9.9	1.1	.67	.61	.58	.65
MIN	.44	.52	.82	1.1	1.7	1.9	1.1	.56	.50	.43	.43	.47
AC-FT	30	46	74	285	419	1040	136	48	33	30	32	31

CAL YR 1978 TOTAL 8256.69 MEAN 22.6 MAX 1920 MIN .44 AC-FT 16380
WTR YR 1979 TOTAL 1110.76 MEAN 3.04 MAX 161 MIN .43 AC-FT 2200

11136100 SAN ANTONIO CREEK NEAR CASMALIA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1977 to current year.
CHEMICAL ANALYSES: October 1977 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT						
12...	1100	.49	3350	7.8	17.0	2340
31...	0835	.46	3420	7.7	12.0	2210
NOV						
30...	0850	.77	2890	7.2	11.5	2060
DEC						
28...	0930	1.2	2940	7.2	9.0	2040
JAN						
31...	1105	4.0	2220	--	9.0	1520
FEB						
28...	1305	2.5	2590	7.9	12.0	1800
MAR						
30...	1020	42	1120	7.5	14.0	801
MAY						
03...	1030	.91	3280	7.5	16.0	2060
JUN						
06...	0950	.65	3450	8.0	16.5	2280
26...	1035	.50	3380	8.1	17.5	2280
AUG						
02...	0950	.49	3380	7.7	18.5	2310
SEP						
07...	1125	.52	3510	7.7	18.5	2280

11136800 CUYAMA RIVER BELOW BUCKHORN CANYON, NEAR SANTA MARIA, CA

LOCATION.--Lat 35°01'19", long 120°13'39", in SW¼ sec.14, T.11 N., R.32 W., San Luis Obispo-Santa Barbara County line, Hydrologic Unit 18060007, on downstream side of bridge on State Highway 166, 0.7 mi (1.1 km) downstream from Buckhorn Canyon, and 13 mi (21 km) northeast of Santa Maria.

DRAINAGE AREA.--886 mi² (2,290 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1903 to December 1905 (published as Santa Maria River near Santa Maria), October 1959 to current year. Monthly discharge only for October 1903 and July 1904 and yearly estimate for water year 1941 (incomplete), published in WSP 1315-B.

GAGE.--Water-stage recorder. Altitude of gage is 760 ft (232 m), from topographic map. Prior to October 1959, nonrecording gage at different site and datum.

REVISED RECORDS.--WDR-CA-77-1: 1976.

REMARKS.--Records fair. No regulation above station. Pumping from wells along stream for irrigation of several thousand acres in Upper Cuyama Valley.

AVERAGE DISCHARGE.--22 years (water years 1904, 1905, 1960-79) 21.7 ft³/s (0.615 m³/s), 15,720 acre-ft/yr (19.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,800 ft³/s (504 m³/s) Feb. 25, 1969, gage height, 13.70 ft (4.176 m), from rating curve extended above 4,900 ft³/s (139 m³/s) on basis of slope-area measurement at gage height 10.85 ft (3.307 m); maximum gage height, 14.74 ft (4.493 m) Mar. 4, 1978; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 14	2400	234	6.63	6.94	2.115
Mar. 28	1945	*726	20.6	7.58	2.310

Minimum daily discharge, 0.40 ft³/s (0.011 m³/s) Sept. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	.53	1.0	2.7	19	25	76	8.1	3.4	1.8	.65	.48
2	.63	.53	1.3	2.7	14	22	84	8.0	3.2	1.9	.67	.47
3	.65	.54	1.2	2.8	18	17	57	8.3	3.0	1.8	.68	.47
4	.66	.54	1.0	2.9	12	14	42	8.1	3.1	1.8	.67	.48
5	.64	.53	1.1	3.7	7.6	12	33	7.5	3.0	1.7	.65	.49
6	.62	.52	1.1	6.6	6.0	11	29	7.2	3.0	1.7	.64	.46
7	.58	.52	1.1	5.4	5.0	10	27	7.7	2.9	1.6	.64	.49
8	.58	.52	1.2	4.2	4.5	9.6	25	7.5	2.9	1.5	.62	.48
9	.59	.53	1.1	5.1	4.2	9.0	23	7.3	2.8	1.4	.61	.47
10	.57	.55	1.2	3.9	3.8	8.4	21	6.9	2.7	1.4	.60	.48
11	.56	1.0	1.2	4.2	3.8	7.9	21	6.2	2.6	1.3	.60	.49
12	.56	1.9	1.4	4.1	3.9	8.5	20	5.8	2.5	1.2	.58	.49
13	.55	1.8	1.6	3.5	4.9	9.7	18	5.5	2.5	1.2	.57	.48
14	.53	1.8	1.5	5.3	33	13	16	5.3	2.5	1.2	.59	.48
15	.53	1.2	1.3	30	76	13	15	5.3	2.3	1.2	.60	.44
16	.54	.82	1.2	28	20	14	14	5.3	2.3	1.1	.59	.41
17	.54	.72	2.1	19	14	20	14	5.2	2.4	1.1	.58	.41
18	.54	.67	9.4	19	10	15	13	5.0	2.4	1.0	.59	.41
19	.55	.64	17	12	9.7	18	12	5.0	2.4	1.0	.59	.41
20	.56	.63	6.0	8.7	17	20	12	4.9	2.3	1.0	.58	.42
21	.57	1.1	4.3	7.7	77	22	11	4.6	2.2	.91	.58	.42
22	.57	3.7	3.6	6.5	68	19	10	4.4	2.2	.92	.57	.42
23	.56	2.9	3.4	5.8	101	14	10	4.3	2.2	.93	.57	.41
24	.55	1.7	3.2	5.5	59	13	10	4.2	2.2	.90	.57	.41
25	.54	1.3	3.2	5.3	36	12	9.7	3.9	2.2	.85	.55	.40
26	.54	1.2	3.2	4.4	32	12	9.5	3.6	2.2	.78	.52	.41
27	.53	1.1	3.3	3.8	25	78	9.5	3.6	2.1	.79	.45	.41
28	.54	.97	3.8	4.1	20	413	8.3	3.6	1.9	.78	.46	.41
29	.54	.90	3.6	3.9	---	387	8.1	3.6	1.8	.76	.47	.45
30	.54	.87	3.3	4.4	---	157	7.6	3.4	1.8	.69	.46	.42
31	.53	---	3.0	8.6	---	100	---	3.5	---	.67	.48	---
TOTAL	17.61	32.23	92.5	233.8	704.3	1504.1	645.7	172.8	75.0	36.78	17.98	13.39
MEAN	.57	1.07	2.98	7.54	25.2	48.5	21.5	5.57	2.50	1.19	.58	.45
MAX	.66	3.7	17	30	101	413	76	8.3	3.4	1.9	.68	.49
MIN	.53	.52	1.0	2.7	3.8	7.9	7.6	3.4	1.8	.67	.45	.40
AC-FT	35	64	183	464	1400	2980	1280	343	149	73	36	27

CAL YR 1978 TOTAL 30834.45 MEAN 84.5 MAX 6640 MIN 0 AC-FT 61160
WTR YR 1979 TOTAL 3546.19 MEAN 9.72 MAX 413 MIN .40 AC-FT 7030

11136800 CUYAMA RIVER BELOW BUCKHORN CANYON, NEAR SANTA MARIA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1977 to current year.
CHEMICAL ANALYSES: October 1977 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT						
11...	1410	.60	1420	8.1	20.5	1190
30...	1350	.53	1510	8.0	16.5	1170
NOV						
29...	1345	.91	1500	7.8	16.0	1180
DEC						
27...	1320	3.5	2270	7.7	12.5	1920
JAN						
30...	1355	4.2	2640	--	9.5	2290
FEB						
28...	0715	22	1950	8.2	8.5	1640
MAR						
28...	1200	409	1670	7.6	12.5	1290
MAY						
02...	1110	8.9	2020	7.7	17.5	1600
JUN						
05...	1000	3.3	1570	7.7	17.5	1290
25...	1200	2.2	1430	7.5	18.0	1180
AUG						
01...	1415	.66	1370	7.8	22.5	1130
SEP						
09...	1010	.53	1510	7.9	18.5	1190

11137900 HUASNA RIVER NEAR ARROYO GRANDE, CA

LOCATION.--Lat 35°04'40", long 120°22'15", in Huasna Grant, San Luis Obispo County, Hydrologic Unit 18060007, on right bank 300 ft (90 m) downstream from Huasna Creek, and 12 mi (19 km) southeast of Arroyo Grande.

DRAINAGE AREA.--103 mi² (267 km²).

PERIOD OF RECORD.--June 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 640 ft (195 m), from topographic map.

REMARKS.--Records poor. No regulation above station. Some diversion above station into cattle ponds by two ranches upstream and one ranch at station. Extensive diversions by pumping for irrigation above station.

AVERAGE DISCHARGE.--20 years, 17.8 ft³/s (0.504 m³/s), 12,900 acre-ft/yr (15.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,000 ft³/s (595 m³/s) Jan. 25, 1969, gage height, 15.90 ft (4.846 m), from rating curve extended above 1,300 ft³/s (36.8 m³/s) on basis of slope-area measurement of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 40 ft³/s (1.13 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 21	1800	126	3.57	3.79	1.155
Mar. 29	1845	*743	21.0	5.41	1.649

Minimum daily discharge, 0.48 ft³/s (0.014 m³/s) Sept. 27, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.1	1.1	.76	1.9	19	110	5.7	2.7	1.1	.69	.94
2	1.4	1.1	1.1	.83	1.8	13	71	5.5	2.7	1.5	.62	.86
3	1.4	.98	1.1	.83	1.2	8.8	57	5.2	2.3	1.3	.62	1.0
4	1.4	1.1	1.1	.83	.96	6.5	45	4.7	1.8	1.3	.52	1.2
5	1.4	1.0	1.1	1.2	.96	4.9	39	4.2	1.8	1.3	.58	1.3
6	1.4	1.1	1.3	1.2	.96	3.9	32	4.2	1.6	1.5	.58	1.3
7	1.3	1.0	1.2	1.1	.96	3.4	27	3.8	1.4	1.5	.62	1.3
8	1.3	1.1	1.1	1.1	.96	3.1	26	3.8	1.3	1.7	1.3	1.3
9	1.3	1.1	1.1	1.2	.96	2.5	23	3.8	1.3	1.9	.83	1.1
10	1.3	1.1	1.1	1.1	.96	1.7	22	3.4	1.3	2.1	.75	.80
11	1.3	1.1	1.2	1.1	.96	1.4	21	3.4	1.2	2.3	.75	.97
12	1.3	1.0	1.2	.96	.96	1.3	17	3.4	1.1	1.5	.73	.80
13	1.2	1.2	1.1	.96	1.3	1.3	16	3.0	1.1	1.7	.83	.80
14	1.1	1.1	1.1	1.2	3.3	.96	15	3.0	1.3	1.5	.78	.68
15	1.1	1.2	1.1	2.4	1.5	1.5	14	3.0	1.6	1.7	.78	.64
16	1.0	1.1	1.1	1.6	2.1	2.8	14	3.0	1.5	1.9	.86	.64
17	1.2	1.2	1.1	1.2	1.5	7.1	13	3.0	1.5	3.4	.97	.68
18	1.0	1.3	1.7	1.2	1.3	8.6	12	3.0	1.5	1.1	1.0	.68
19	1.1	1.3	1.5	1.1	1.4	9.2	11	3.0	1.7	.69	1.2	.70
20	1.1	1.3	.96	.96	4.4	10	12	2.7	1.3	.69	1.3	.73
21	1.1	1.3	.87	.96	72	14	13	2.3	.96	.69	1.2	.70
22	1.1	1.4	.96	.96	88	8.9	8.6	2.3	.96	1.2	1.2	.89
23	1.2	1.1	.96	.96	98	6.5	7.9	2.0	.96	.85	1.4	.52
24	1.2	1.1	.96	.96	76	4.9	7.3	1.8	1.0	1.0	1.3	.50
25	1.1	1.1	.87	.96	56	4.1	6.5	1.8	.96	1.4	.91	.50
26	1.1	.96	.86	.96	41	3.8	6.4	2.0	.92	.90	1.0	.49
27	1.1	.96	.96	.96	31	155	6.6	2.0	.96	.72	1.2	.48
28	1.1	.96	.96	1.1	22	360	6.3	2.0	.99	1.3	1.3	.48
29	1.1	.95	.70	1.1	---	504	6.1	2.0	.96	.66	1.2	.49
30	1.1	.96	.63	1.3	---	300	5.9	2.3	1.1	.51	1.3	.52
31	1.1	---	.76	2.4	---	200	---	2.3	---	.71	1.2	---
TOTAL	37.3	33.27	32.85	35.45	514.34	1672.16	671.6	97.6	41.77	41.62	29.52	23.99
MEAN	1.20	1.11	1.06	1.14	18.4	53.9	22.4	3.15	1.39	1.34	.95	.80
MAX	1.4	1.4	1.7	2.4	98	504	110	5.7	2.7	3.4	1.4	1.3
MIN	1.0	.95	.63	.76	.96	.96	5.9	1.8	.92	.51	.52	.48
AC-FT	74	66	65	70	1020	3320	1330	194	83	83	59	48

CAL YR 1978 TOTAL 20326.72 MEAN 55.7 MAX 2690 MIN .05 AC-FT 40320
WTR YR 1979 TOTAL 3231.47 MEAN 8.85 MAX 504 MIN .48 AC-FT 6410

11138100 CUYAMA RIVER BELOW TWITCHELL DAM, CA

LOCATION.--Lat 34°56'40", long 120°17'30", in Suey Grant, Santa Barbara County, Hydrologic Unit 18060007, on left bank 3.5 mi (5.6 km) upstream from mouth, 4 mi (6 km) northeast of Garey, and 4.4 mi (7.1 km) downstream from Twitchell Dam.

DRAINAGE AREA.--1,132 mi² (2,932 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 401.94 ft (122.511 m) Water and Power Resources Service datum.

REMARKS.--Records good. Flow regulated since February 1959 by Twitchell Reservoir, capacity 240,000 acre-ft (296 hm³). Controlled releases are for ground-water recharge in Santa Maria Valley. Some pumping from wells along stream for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,100 ft³/s (258 m³/s) June 13, 1973, gage height, 8.22 ft (2.505 m), result of sluicing at dam; no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 413 ft³/s (11.7 m³/s) Aug. 11, gage height, 4.34 ft (1.323 m); minimum daily, 0.07 ft³/s ([illegible]2 m³/s) Apr. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	272	252	225	190	90	46	1.1	96	205	303	346	5.3
2	271	252	222	190	91	45	.80	101	210	304	343	4.7
3	269	251	221	188	88	45	.60	109	214	304	337	4.5
4	270	251	221	189	86	46	.46	109	219	304	333	3.9
5	271	252	220	189	87	50	.38	110	225	304	331	3.5
6	269	251	218	187	86	82	.31	110	231	305	334	2.9
7	267	251	217	187	86	83	.25	110	234	304	338	2.8
8	266	248	216	187	86	86	.16	117	238	304	339	2.7
9	262	248	215	185	106	124	.10	126	243	303	342	2.5
10	260	247	215	184	162	124	.08	131	248	303	343	2.6
11	262	247	215	184	161	125	.08	152	253	301	374	2.3
12	265	245	214	183	161	126	.08	152	259	300	407	2.3
13	208	246	212	182	163	125	.08	153	264	300	402	2.3
14	267	243	212	184	126	124	.08	155	268	301	399	2.3
15	272	239	211	186	13	122	.08	156	274	301	391	2.3
16	272	239	209	103	6.9	88	.07	157	277	301	387	2.1
17	273	235	211	95	4.7	12	12	159	280	301	384	1.9
18	272	233	213	95	3.5	4.5	38	159	283	301	382	1.9
19	271	233	211	93	2.8	3.0	40	159	284	302	377	1.8
20	269	233	205	93	2.9	1.8	40	159	285	303	373	1.7
21	269	234	203	93	5.1	1.2	45	160	285	303	368	1.6
22	267	233	201	102	3.4	.86	67	161	286	314	361	2.5
23	266	230	199	176	4.1	16	67	161	285	346	98	2.1
24	264	230	198	176	2.8	70	73	162	285	345	21	2.0
25	262	227	197	177	2.3	72	111	164	295	346	14	2.0
26	260	226	195	177	3.9	74	49	166	312	346	10	2.2
27	259	225	195	177	41	48	52	169	310	346	7.4	2.2
28	259	224	195	177	44	9.8	96	171	306	346	6.2	2.3
29	256	224	193	177	---	5.2	99	174	303	347	6.0	2.2
30	252	223	191	177	---	2.7	98	197	302	360	6.1	4.6
31	252	---	190	151	---	1.7	---	201	---	362	5.7	---
TOTAL	8174	7172	6460	5034	1721.4	1763.76	891.71	4566	7963	9800	8165.4	80.0
MEAN	264	239	208	162	61.5	56.9	29.7	147	265	316	263	2.67
MAX	273	252	225	190	163	126	111	201	312	360	407	5.3
MIN	208	223	190	93	2.3	.86	.07	96	205	300	5.7	1.6
AC-FT	16210	14230	12810	9980	3410	3500	1770	9060	15790	19440	16200	159

CAL YR 1978 TOTAL 63467.47 MEAN 174 MAX 330 MIN 0 AC-FT 125900
WTR YR 1979 TOTAL 61791.27 MEAN 169 MAX 407 MIN .07 AC-FT 122600

11138100 CUYAMA RIVER BELOW TWITCHELL DAM, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-71, 1973-75, 1978 to current year.
CHEMICAL ANALYSES: Water years 1967-71, 1973-75, 1978 to current year.

COOPERATION.--Chemical-quality records were furnished by California Department of Water Resources.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
NOV											
24...	1650	230	870	8.2	14.0	10	10.0	410	110	32	56
JAN											
29...	1205	177	920	8.8	10.5	8	14.1	430	120	35	57
APR											
23...	1055	68	1010	8.9	18.0	3	14.6	490	130	42	78
MAY											
14...	0905	156	--	--	17.2	--	--	--	--	--	--
JUL											
20...	1710	381	990	8.3	24.0	0	9.1	490	120	44	69

DATE	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)
NOV										
24...	23	1.2	5.0	150	320	32	.6	634	.68	3.0
JAN										
29...	22	1.2	4.0	160	340	35	.6	739	.54	2.4
APR										
23...	23	1.4	4.0	150	410	41	.7	820	.00	.00
MAY										
14...	--	--	--	--	--	--	--	--	--	--
JUL										
20...	24	1.4	3.0	180	400	45	.6	835	.05	.20

DATE	TIME	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV									
24...	1650	--	0	--	--	--	--	--	--
JAN									
29...	1205	--	200	--	--	--	--	--	--
APR									
23...	1055	--	200	--	--	--	--	--	--
MAY									
14...	0905	0	--	0	10	0	0	.0	0
JUL									
20...	1710	--	300	--	--	--	--	--	--

11138500 SISQUOC RIVER NEAR SISQUOC, CA

LOCATION.--Lat 34°50'23", long 120°10'02", in Sisquoc Grant, Santa Barbara County, Hydrologic Unit 18060008, on left bank 2.6 mi (4.2 km) upstream from La Brea Creek, and 7 mi (11 km) east of Sisquoc.

DRAINAGE AREA.--281 mi² (728 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1943 to current year. October 1929 to September 1933, at site 0.2 mi (0.3 km) downstream; low-flow records not equivalent owing to diversion immediately upstream. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.--Water-stage recorder. Datum of gage is 624.30 ft (190.287 m) Corps of Engineers datum. See WSP 1735 for history of changes prior to Aug. 24, 1951.

REMARKS.--Records fair. No stage-discharge relationship Aug. 17-25, Aug. 28 to Sept. 29. No regulation or diversion above station.

AVERAGE DISCHARGE.--36 years, 43.3 ft³/s (1.226 m³/s), 31,370 acre-ft/yr (38.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,200 ft³/s (657 m³/s) Dec. 6, 1966, gage height, 15.75 ft (4.801 m), from rating curve extended above 1,700 ft³/s (48.1 m³/s) on basis of slope-area measurements at gage heights 10.08 ft (3.072 m) and 15.75 ft (4.801 m); no flow Nov. 11-18, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 2, 1938, 11,000 ft³/s (312 m³/s), gage height, 8.1 ft (2.47 m), from high-water mark in gage well, at site in use 1929-33, from rating curve extended above 2,800 ft³/s (79.3 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 6	1000	289	8.18	3.71	1.131	Feb. 21	0830	442	12.5	3.15	0.960
Jan. 15	1630	294	8.33	3.32	1.012	Mar. 28	1130	*1,310	37.1	4.16	1.268
Feb. 14	0700	1,260	35.7	4.10	1.250						

Minimum daily discharge, 1.2 ft³/s (0.034 m³/s) Sept. 29-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	2.6	8.5	12	87	140	284	69	24	6.8	1.9	1.7
2	4.0	2.4	8.8	11	73	130	250	67	23	6.8	1.9	1.7
3	4.0	2.4	8.9	11	71	116	227	65	22	6.8	1.9	1.6
4	3.9	2.3	8.1	11	65	110	210	63	20	6.8	1.9	1.6
5	3.9	2.3	8.1	14	59	110	190	59	19	6.8	1.9	1.6
6	3.5	2.2	8.1	141	54	107	196	58	17	6.8	1.9	1.6
7	3.5	2.1	7.8	61	54	110	186	58	16	6.4	1.9	1.6
8	3.5	2.1	7.5	38	52	116	175	58	15	5.9	1.9	1.6
9	3.4	2.2	7.2	30	51	113	167	58	14	5.5	1.9	1.5
10	3.2	2.3	7.0	28	49	107	160	54	13	5.1	1.9	1.5
11	3.2	3.2	7.0	25	47	104	150	51	12	4.4	1.9	1.5
12	2.9	3.2	7.0	23	46	102	140	49	12	3.7	1.9	1.5
13	2.8	3.2	7.0	20	49	97	137	46	12	3.4	1.9	1.5
14	2.8	3.2	7.0	20	571	99	130	44	12	3.1	1.9	1.5
15	2.8	3.2	7.0	136	236	94	126	43	12	2.9	1.9	1.4
16	2.8	3.1	7.2	127	178	98	118	43	11	2.9	1.9	1.4
17	2.8	2.9	8.1	78	150	113	116	41	11	2.6	1.8	1.4
18	2.8	2.8	12	67	121	102	110	40	11	2.4	1.8	1.4
19	2.8	2.8	46	59	107	97	102	38	11	2.4	1.8	1.4
20	2.8	2.9	41	51	107	98	97	37	11	2.1	1.8	1.4
21	2.8	3.4	35	46	300	99	92	37	11	2.1	1.8	1.4
22	2.8	5.7	29	41	260	96	89	37	11	2.1	1.8	1.3
23	2.8	12	26	38	254	89	87	35	10	2.1	1.8	1.3
24	2.7	13	22	37	211	86	84	33	10	2.1	1.8	1.3
25	2.7	12	19	35	178	82	84	32	10	2.1	1.7	1.3
26	2.7	11	17	33	156	86	80	29	10	2.1	1.7	1.3
27	2.7	9.9	15	32	140	457	80	28	10	2.1	1.7	1.3
28	2.7	9.1	14	30	127	996	75	27	9.4	2.1	1.7	1.3
29	2.7	8.5	14	29	---	703	71	26	8.8	2.1	1.7	1.2
30	2.7	7.8	13	30	---	485	69	26	7.3	1.9	1.7	1.2
31	2.7	---	13	43	---	342	---	25	---	1.9	1.7	---
TOTAL	95.4	145.8	445.9	1368	3852	5684	4086	1376	395.5	116.3	56.7	43.3
MEAN	3.08	4.86	14.4	44.1	138	183	136	44.4	13.2	3.75	1.83	1.44
MAX	4.0	13	46	141	571	996	284	69	24	6.8	1.9	1.7
MIN	2.7	2.1	7.0	11	46	82	69	25	7.3	1.9	1.7	1.2
AC-FT	189	289	884	2710	7640	11270	8100	2730	784	231	112	86

CAL YR 1978 TOTAL 68237.1 MEAN 187 MAX 6080 MIN 2.1 AC-FT 135300
WTR YR 1979 TOTAL 17588.9 MEAN 48.2 MAX 996 MIN 1.2 AC-FT 34890

11138500 SISQUOC RIVER NEAR SISQUOC, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1977 to current year.
CHEMICAL ANALYSES: October 1977 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT						
11...	1015	3.4	1240	8.0	18.0	868
30...	0930	2.8	1140	8.0	14.5	860
NOV						
29...	0945	9.3	1180	7.9	11.5	853
DEC						
27...	0930	19	1200	7.8	9.5	850
JAN						
30...	0910	29	1120	7.3	9.5	827
FEB						
27...	0845	143	980	8.3	10.5	725
APR						
04...	1225	215	960	8.2	17.0	660
MAY						
03...	0825	66	1020	8.0	15.0	716
JUN						
08...	0730	19	970	7.6	16.0	745
20...	0715	10	1050	7.7	16.0	760
AUG						
01...	0940	2.1	1090	7.8	18.5	--
SEP						
07...	0745	1.6	1070	7.6	17.0	813

11138500 TEPUSQUET CREEK NEAR SISQUOC, CA

LOCATION.--Lat 34°52'21", long 120°14'37", in NE¼ sec.9, T.9 N., R.32 W., Santa Barbara County, Hydrologic Unit 18060008, on downstream wingwall of right bridge abutment on Tepusquet Road, 1.1 mi (1.8 km) upstream from mouth, and 3 mi (5 km) east of Sisquoc.

DRAINAGE AREA.--28.7 mi² (74.3 km²).

PERIOD OF RECORD.--October 1943 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 500 ft (152 m), from topographic map. Prior to Dec. 9, 1968, at datum 0.9 ft (0.27 m) higher.

REMARKS.--Records fair. No regulation above station. Some diversion by pumping from wells along stream to irrigate about 100 acres (405,000 m²) above gage.

AVERAGE DISCHARGE.--36 years, 1.51 ft³/s (0.043 m³/s), 1,090 acre-ft/yr (1.34 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 788 ft³/s (22.3 m³/s) Dec. 6, 1966, gage height, 3.51 ft (1.070 m), from rating curve extended above 220 ft³/s (6.23 m³/s) on basis of computation of maximum flow at contracted opening; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 57 ft³/s (1.61 m³/s) Mar. 28 (0600 hrs), gage height, 4.06 ft (1.237 m), no other peak above base of 50 ft³/s (1.42 m³/s); minimum daily, 0.03 ft³/s (0.001 m³/s) Nov. 6-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.07	.12	.18	.30	2.9	7.9	1.6	.94	.85	.33	.17
2	.11	.04	.10	.18	.09	2.2	6.4	1.6	.90	.88	.33	.16
3	.09	.04	.10	.17	.43	1.7	5.4	1.5	.89	.86	.33	.16
4	.10	.06	.08	.17	.38	1.4	4.8	1.5	.88	.83	.33	.17
5	.11	.05	.09	.62	.32	1.3	4.6	1.5	.87	.82	.31	.19
6	.11	.03	.08	.25	.32	1.1	4.1	1.4	.88	.81	.31	.19
7	.14	.03	.11	.19	.32	1.0	3.9	1.3	.87	.59	.30	.19
8	.11	.03	.12	.21	.32	1.0	3.4	1.4	.86	.58	.29	.19
9	.12	.05	.13	.24	.32	1.0	3.6	1.4	.78	.58	.29	.18
10	.11	.08	.12	.29	.32	.91	3.1	1.5	.77	.57	.29	.16
11	.10	.12	.10	.20	.32	.84	3.1	1.5	.77	.56	.29	.16
12	.13	.10	.11	.21	.32	.86	2.7	1.4	.81	.53	.30	.15
13	.11	.17	.12	.23	.30	.85	2.6	1.4	.83	.52	.29	.14
14	.11	.04	.11	.33	.50	.85	2.5	1.4	.85	.47	.27	.15
15	.10	.04	.12	.94	.30	.95	2.4	1.3	.81	.46	.26	.15
16	.11	.04	.12	.49	.57	.95	2.3	1.3	.77	.46	.26	.13
17	.11	.08	.20	.36	.55	1.6	2.1	1.3	.74	.46	.26	.13
18	.10	.07	.30	.63	.50	1.3	2.1	1.2	.75	.45	.26	.14
19	.08	.05	.47	.37	.50	2.1	2.0	1.2	.71	.44	.25	.13
20	.10	.07	.26	.32	.94	2.0	2.0	1.2	.72	.44	.24	.16
21	.11	.19	.22	.27	7.7	1.8	2.0	1.2	.72	.43	.23	.17
22	.08	.21	.19	.26	7.4	1.6	2.0	1.2	.71	.42	.23	.22
23	.05	.11	.10	.26	11	1.5	2.0	1.1	.71	.40	.23	.23
24	.05	.09	.10	.23	7.3	1.3	2.0	1.0	.72	.38	.22	.22
25	.04	.11	.15	.23	5.4	1.2	1.8	1.0	.71	.38	.22	.23
26	.08	.11	.15	.29	3.8	1.2	1.7	1.0	.70	.38	.22	.23
27	.04	.10	.17	.25	2.4	7.1	1.7	1.0	.68	.37	.20	.22
28	.07	.09	.19	.25	1.9	31	1.6	1.0	.67	.36	.20	.24
29	.05	.04	.17	.25	---	20	1.6	1.0	.66	.35	.20	.20
30	.04	.07	.18	.27	---	14	1.6	1.0	.65	.34	.20	.20
31	.07	---	.18	.30	---	9.0	---	1.0	---	.34	.17	---
TOTAL	2.94	2.62	4.88	8.98	55.97	124.46	88.1	39.4	23.33	15.12	8.03	5.66
MEAN	.095	.087	.16	.29	2.00	4.01	2.94	1.27	.78	.49	.26	.19
MAX	.14	.21	.47	.94	11	31	7.9	1.6	.94	.88	.33	.24
MIN	.05	.03	.08	.17	.32	.85	1.6	1.0	.65	.34	.17	.13
AC-FT	5.8	5.2	9.7	18	110	247	175	78	46	30	16	11

CAL YR 1978 TOTAL 1417.07 MEAN 3.88 MAX 260 MIN 0 AC-FT 2810
WTR YR 1979 TOTAL 379.49 MEAN 1.04 MAX 31 MIN .03 AC-FT 752

11140000 SISQUOC RIVER NEAR GAREY, CA

LOCATION.--Lat 34°53'30", long 120°18'20", in SW¼ sec.30, T.10 N., R.33 W., Santa Barbara County, Hydrologic Unit 18060008, on downstream side of Santa Maria Mesa Road bridge near left bank, 0.6 mi (1.0 km) northeast of Garey, and 3.7 mi (6.0 km) downstream from Tepusquet Creek.

DRAINAGE AREA.--471 mi^2 (1,220 km^2).

PERIOD OF RECORD.--October 1940 to current year. Records for water year 1941 incomplete, yearly estimate and monthly discharge only for October 1940 and January 1941, published in WSP 1315-B.

GAGE.--Two water-stage recorders. Datum of main gage is 354.8 ft (108.14 m) Santa Barbara County datum. See WSP 1735 for history of changes of main gage prior to Oct. 1, 1959. Oct. 1, 1959, to Dec. 30, 1965, at datum 6.00 ft (1.829 m) higher. Since Oct. 1, 1959, supplementary gage on downstream side of bridge near right bank at same datum.

REMARKS.--Records fair. No regulation above station. Pumping from wells along stream for irrigation of about 7,000 acres (28.3 km^2) above station.

AVERAGE DISCHARGE.--39 years, 40.3 ft^3/s (1.141 m^3/s), 29,200 acre-ft/yr (36.0 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,500 ft^3/s (694 m^3/s) Jan. 25, 1969, gage height, 13.00 ft (3.962 m); maximum gage height, 13.50 ft (4.115 m) Dec. 6, 1966; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft^3/s (5.66 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 15	2245	310	8.78	6.27	1.911	Feb. 21	1430	965	27.3	6.21	1.893
Feb. 14	1030	2,200	62.3	*6.66	2.030	Mar. 28	1245	*2,490	70.5	6.65	2.027

Minimum daily discharge, no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	42	95	563	35	8.3			
2	0	0	0	0	70	90	410	36	6.1			
3	0	0	0	0	73	85	284	33	3.3			
4	0	.01	0	.05	54	59	217	32	5.0			
5	0	0	0	.10	30	56	190	30	5.4			
6	0	.02	0	0	25	51	177	28	4.7			
7	0	.10	0	0	20	60	173	29	3.4			
8	0	.07	.02	.07	13	71	160	30	2.8			
9	0	.02	0	.10	.46	69	148	31	1.3			
10	0	.10	0	.10	.17	53	135	29	.28			
11	0	.05	0	.08	.17	64	125	27	.01			
12	.13	0	0	.07	.16	53	115	24	.03			
13	.22	.01	.02	.02	.15	50	105	21	0			
14	.05	.17	.05	.02	504	61	97	20	0			
15	.02	.20	.05	30	265	55	91	19	0			
16	.10	.20	.05	66	125	67	86	18	0			
17	.14	.26	.01	46	29	108	80	18	0			
18	.04	.15	.04	36	6.5	96	74	17	0			
19	0	.12	.09	11	6.0	92	64	15	0			
20	0	.04	.10	0	27	89	61	14	0			
21	0	.17	.06	0	441	73	56	15	0			
22	0	.06	.07	0	424	55	51	16	0			
23	0	0	0	0	355	43	49	15	0			
24	0	0	0	0	296	35	47	15	0			
25	0	0	0	0	227	25	46	14	0			
26	0	0	0	0	160	26	44	17	0			
27	0	0	.04	0	110	461	43	11	0			
28	0	0	.04	0	103	1420	40	10	0			
29	0	0	.05	0	---	1260	38	9.7	0			
30	0	0	0	0	---	766	36	9.1	0			
31	0	---	0	0	---	685	---	9.1	---			---
TOTAL	.91	2.24	.74	189.61	3406.61	6229	3789	639.9	40.62	0	0	0
MEAN	.029	.075	.024	6.12	122	201	126	20.6	1.35	0	0	0
MAX	.22	.27	.10	66	504	1420	563	35	8.3	0	0	0
MIN	0	0	0	0	.15	25	36	9.1	0	0	0	0
AC-FT	1.8	4.4	1.5	376	6760	12360	7520	1270	81	0	0	0

CAL YR 1978 TOTAL 54320.03 MEAN 149 MAX 9210 MIN 0 AC-FT 107800
WTR YR 1979 TOTAL 14296.62 MEAN 39.2 MAX 1420 MIN 0 AC-FT 28360

11141000 SANTA MARIA RIVER AT GUADALUPE, CA

LOCATION.--Lat 34°58'35", long 120°34'15", in Guadalupe Grant, Santa Barbara County, Hydrologic Unit 18060008, on downstream side of bridge on State Highway 1, 0.5 mi (0.8 km) north of Guadalupe, and 4.5 mi (7.2 km) upstream from mouth.

DRAINAGE AREA.--1,741 mi² (4,509 km²).

PERIOD OF RECORD.--October 1940 to current year. Monthly discharge only October 1940 to January 1941, published in WSP 1315-B.

GAGE.--Three water-stage recorders. Datum of main gage (left channel) is 64.92 ft (19.788 m) National Geodetic Vertical Datum of 1929. Two supplementary gages started in 1956 at various datums and locations. Prior to Aug. 11, 1955, main gage at site 100 ft (30 m) upstream at same datum NGVD.

REMARKS.--Records poor. Cuyama River regulated since February 1959 by Twitchell Reservoir, capacity, 240,000 acre-ft (296 hm³). Several small surface diversions and extensive pumping from wells for irrigation along stream above station. AVERAGE DISCHARGE represents flow to ocean, regardless of upstream development.

AVERAGE DISCHARGE.--39 years, 29.6 ft³/s (0.838 m³/s), 21,450 acre-ft/yr (26.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,800 ft³/s (929 m³/s) Jan. 16, 1952, gage height, 8.18 ft (2.493 m); maximum gage height, 10.00 ft (3.048 m) Feb. 26, 1969; no flow for all or parts of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 755 ft³/s (21.4 m³/s) Mar. 28; gage height, 5.81 ft (1.771 m); no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	0	2.5					
2					0	0	1.0					
3					0	0	0					
4					0	0	0					
5					0	0	0					
6					0	0	0					
7					0	0	0					
8					0	0	0					
9					0	0	0					
10					0	0	0					
11					0	0	0					
12					0	0	0					
13					0	0	0					
14					39	0	0					
15					66	0	0					
16					0	0	0					
17					0	0	0					
18					0	0	0					
19					0	0	0					
20					0	0	0					
21					50	0	0					
22					40	0	0					
23					20	0	0					
24					10	0	0					
25					0	0	0					
26					0	0	0					
27					0	0	0					
28					0	457	0					
29					---	329	0					
30					---	94	0					
31		---			---	14	---		---			---
TOTAL	0	0	0	0	225	894	3.5	0	0	0	0	0
MEAN	0	0	0	0	8.04	28.8	.12	0	0	0	0	0
MAX	0	0	0	0	66	457	2.5	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	446	1770	6.9	0	0	0	0	0

CAL YR 1978 TOTAL 25131.64 MEAN 68.9 MAX 6600 MIN 0 AC-FT 49850
WTR YR 1979 TOTAL 1122.50 MEAN 3.08 MAX 457 MIN 0 AC-FT 2230

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for the current water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been obtained.

Annual maximum discharge at crest-stage partial-record stations during water year 1979

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Bristol Lake basin					
10253000	Gourd Creek near Ludlow, CA	Lat 34°40'35", long 116°01'20", in SW¼ sec.23, T.7 N., R.9 E., Hydrologic Unit 18090208, at culvert on U.S. Highway 66, 8.5 mi (13.7 km) southeast of Ludlow.	0.30	1959-74 1976-79	--	--	0
		Dale Lake basin					
10253320	Quail Wash near Joshua Tree, CA	Lat 34°07'04", long 116°18'27", SW¼NW¼NE¼ sec.1, T.1 S., R.6 E., Hydrologic Unit 18100100, on right bank 0.2 mi (0.3 km) downstream from Coyote Hole Spring and 1.1 mi (1.8 km) south of Joshua Tree.	100	1964-71‡ 1972-79	--	--	<34
10253350	Fortynine Palms Creek near Twentynine Palms, CA	Lat 34°07'12", long 116°05'43" (unsurveyed), San Bernardino County, Hydrologic Unit 18100100, in Joshua Tree National Monument, on left bank 50 ft (15 m) upstream from North Monument boundary, 1.1 mi (1.8 km) downstream from Fortynine Palms Oasis, and 2.6 mi (4.2 km) southwest of Twentynine Palms.	8.55	1962-71‡ 1972-79a	7-20-79	2.39	390
		Salton Sea basin					
10257800	Long Creek near Desert Hot Springs, CA	Lat 33°57'53", long 116°26'33", in NW¼SE¼SE¼ sec.27, T.2 S., R.4 E., Riverside County, Hydrologic Unit 18100200, on left bank 0.4 mi (0.6 km) downstream from Metropolitan Water District aqueduct, and 3.3 mi (5.3 km) east of Desert Hot Springs.	19.4	1963-71‡ 1972-79a	7-20-79	3.57	680
		Emerson Lake basin					
10260200	Pipes Creek near Yucca Valley, CA	Lat 34°10'19", long 116°32'45", in NE¼SE¼NE¼ sec.15, T.1 N., R.4 E., San Bernardino County, Hydrologic Unit 18100100, on left bank 2.8 mi (4.5 km) upstream from Antelope Wash and 6.8 mi (10.9 km) northwest of Yucca Valley.	15.1	1958-71‡ 1972-79a	7-20-79	1.80	88
		Lucerne Dry Lake basin					
10260400	Cushenbury Creek near Lucerne Valley, CA	Lat 34°21'52", long 116°50'42", in NE¼SW¼NE¼ sec.14, T.3 N., R.1 E., San Bernardino County, Hydrologic Unit 18100100, in San Bernardino National Forest, on right bank 0.3 mi upstream from forest boundary, and 9 mi southeast of Lucerne Valley.	6.36	1957-71‡ 1972-76 1978-79a	7-20-79	2.45	19.6
		Mojave River basin					
10261800	Beacon Creek at Helendale, CA	Lat 34°45'00", long 117°18'53", in SE¼ sec.29 T.8 N., R.4 W., Hydrologic Unit 18090208, at culvert on county road (formerly U.S. Highway 66 and 91), 0.6 mi (1.0 km) northeast of Helendale.	0.72	1959-60 1961-67‡ 1968-69 1976-79	--	--	--

‡ Operated as a continuous-record gaging station.
a Discontinued.

Annual maximum discharge at crest-stage partial-record stations during water year 1979--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Discharge (ft^3/s)
		Mojave River basin					
10262600	Boom Creek near Barstow, CA	Lat 34°56'20", long 116°56'57", NE¼NW¼NE¼ sec.2, T.9 N., R.1 W., San Bernardino County, Hydrologic Unit 18090208, at culvert on U.S. Highway I-15, 4.3 mi (6.9 km) east of Barstow.	0.24	1959-66 1967-73‡ 1976-79	7-20-79	10.20	35
		Antelope Valley					
10263900	Buckhorn Creek near Valyermo, CA	Lat 34°20'35", long 117°55'13" in SW¼ sec.15, T.3 N., R.10 W., Hydrologic Unit 18090206, at culvert on State Highway 2, Angeles National Forest, 8.1 mi (13.0 km) southwest of Valyermo.	0.48	1961-66‡ 1967-69 1971-73 1977-79		Unknown	
10264530	Pine Creek near Palmdale, CA	Lat 34°36'09", long 118°14'48", in SW¼ sec.15, T.6 N., R.13 W., Hydrologic Unit 18090206, at culvert on Pine Canyon Road, 7.5 mi (12.1 km) northwest of Palmdale.	1.37	1959-73 1977-79	3-28-79	12.13	14
10264560	Spencer Canyon Creek near Fairmont, CA	Lat 34°46'33", long 118°34'08", in SE¼SW¼SW¼ sec.15, T.8 N., R.16 W., Hydrologic Unit 18090206, at culvert on county road, 8.5 mi (13.7 km) northwest of Fairmont.	3.60	1959-64 1965-73‡ 1974 1978-79	3-28-79	--	10
		San Ysidro Creek basin					
11119660	San Ysidro Creek at Montecito, CA	Lat 34°27'00", long 119°37'19", in Pueblo Lands of Santa Barbara, Santa Barbara County, Hydrologic Unit 18060013, on left bank 0.8 mi (1.3 km)north northeast of intersection of San Ysidro and East Valley Roads, Montecito.	3.07	1969 1972-79	3-27-79	21.18	69
		Sycamore Creek basin					
11119700	Sycamore Creek at Santa Barbara, CA	Lat 34°25'45", long 119°40'35", in Pueblo Lands of Santa Barbara, Santa Barbara County, Hydrologic Unit 18060013, on left bank at intersection of Sycamore Canyon Road and Alameda Padre Serra in Santa Barbara.	3.41	1971-72‡ 1973-79a	3-27-79	2.79	357
		Mission Creek basin					
11119740	Mission Creek at Santa Barbara, CA	Lat 34°27'09", long 119°42'30", in Pueblo Lands of Santa Barbara, Santa Barbara County, Hydrologic Unit 18060013, on left bank 0.4 mi (0.6 km) north of intersection of Foothill Road (Hwy 192) and Mission Canyon Road, 0.8 mi (1.3 km) north of Santa Barbara.	2.78	1972-79	3-27-79	16.40	56
		Santa Ynez River basin					
11131700	Santa Rita Creek near Lompoc, CA	Lat 34°38'41", long 120°22'09", in Santa Rita Grant, Santa Barbara County, Hydrologic Unit 18060010, on left bank 2.4 mi (3.9 km) upstream from mouth and 6.5 mi (10.5 km) east of Lompoc.	14.1	1976-79	3-27-79	8.15	300
11133700	Purisima Creek near Lompoc, CA	Lat 34°41'34", long 120°25'51", in Purisima Grant, Santa Barbara County, Hydrologic Unit 18060010, on right bank 1.1 mi (1.8 km) northeast of junction of Burner Road and Lompoc-Casmalia Road, and 4.0 mi (6.4 km) northeast of Lompoc.	4.75	1972-75‡ 1976-79	3-27-79	2.19	18

‡ Operated as a continuous-record gaging station.
a Discontinued.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1979

Stream	Location	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)
San Luis Rey River	Lat 33°16'16", long 116°50'44", San Diego County, Hydrologic Unit, 18070303, at La Jolla Campground No. 1, 6.5 mi (10.5 km) downstream of Lake Henshaw Dam.	1-19-79	1430	16	0.453
		2-6-79	1215	40	1.13
		4-26-79	1445	261	7.39
		5-9-79	0945	256	7.25
		6-14-79	0830	50	1.42
		8-1-79	1330	37	1.05
		9-12-79	1500	38	1.08

SITE NUMBER 331603114550601 LOCAL NUMBER 010S019E25R01S

ABOUT 6 MI NORTHWEST OF HWY 78 AND WEST OF MIDWAY ROAD. DRILLED WATER-TABLE WELL. DIAM 8 IN. DEPTH UNKNOWN. ALTITUDE OF LSD 820 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 194.47 FEET BELOW LAND SURFACE DATUM AUG 01, 1979.

LOWEST WATER LEVEL 194.47 FEET BELOW LAND SURFACE DATUM AUG 01, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
AUG 01, 1979	194.47

SITE NUMBER 331659114481001 LOCAL NUMBER 010S021E30C01S

IN MILPITAS WASH, WEST OF OGILBY ROAD. DRILLED OBSERVATION WATER-TABLE WELL. DIAM 1.25 IN. DEPTH 70.1 FT. ALTITUDE OF LSD 485 FT. RECORDS AVAILABLE 1972, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 36.04 FEET BELOW LAND SURFACE DATUM AUG 01, 1979.

LOWEST WATER LEVEL 42.42 FEET BELOW LAND SURFACE DATUM AUG 24, 1972.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
AUG 01, 1979	36.04

SITE NUMBER 330701116003501 LOCAL NUMBER 012S009E23D01S

ABOUT 0.5 MI SOUTH OF HWY 78 AND 0.75 MI NORTH OF SAN FELIPE CREEK. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 14 IN. DEPTH 540 FT. ALTITUDE OF LSD -15 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 142.58 FEET BELOW LAND SURFACE DATUM DEC 27, 1978.

LOWEST WATER LEVEL 142.58 FEET BELOW LAND SURFACE DATUM DEC 27, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 27, 1978	142.58

SITE NUMBER 330701116003502 LOCAL NUMBER 012S009E23D02S

ABOUT 0.5 MI SOUTH OF HWY 78 AND 0.75 MI NORTH OF SAN FELIPE CREEK. DRILLED IRRIGATION WATER-TABLE WELL IN ALLUVIUM. DIAM 14 TO 12.75 IN. DEPTH 673 FT. 14-IN CSG 0-265 FT. 12.75-IN CSG 265-273 FT. PERFORATED 265-673 FT. ALTITUDE OF LSD -15 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 142.55 FEET BELOW LAND SURFACE DATUM DEC 27, 1978.

LOWEST WATER LEVEL 142.55 FEET BELOW LAND SURFACE DATUM DEC 27, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 27, 1978	142.55

SITE NUMBER 325955115042601 LOCAL NUMBER 013S018E33A01S

IN GLAMIS. DRILLED DOMESTIC WATER-TABLE WELL. DIAM UNKNOWN. DEPTH 660 FT. ALTITUDE OF LSD 335 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 196.11 FEET BELOW LAND SURFACE DATUM JAN 10, 1979.

LOWEST WATER LEVEL 196.11 FEET BELOW LAND SURFACE DATUM JAN 10, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JAN 10, 1979	196.11

SITE NUMBER 325114115335201 LOCAL NUMBER 015S014E18C01S

IN IMPERIAL. DRILLED UNUSED WATER-TABLE WELL. DIAM 8 IN. DEPTH 500 FT IN 1958, 379.02 FT IN 1978. PERFORATED 140-440 FT. ALTITUDE OF LSD -64.97 FT. RECORDS AVAILABLE 1958, 1961, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 2.61 FEET BELOW LAND SURFACE DATUM OCT 16, 1979.

LOWEST WATER LEVEL 11.55 FEET BELOW LAND SURFACE DATUM OCT 24, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 1978	11.55	MAR 07, 1979	7.96	JUN 12, 1979	7.69	SEP 19, 1979	7.60
DEC 19	7.67	APR 06	7.78	27	7.69		
JAN 17, 1979	7.74	MAY 03	7.63	JUL 24	7.65		
FEB 08	7.93	JUN 01	7.64	AUG 23	7.70		

SITE NUMBER 324928114442201 LOCAL NUMBER 015S020E25N01S

ABOUT 1 MI NORTHEAST OF OGILBY. DRILLED UNUSED WATER-TABLE WELL. DIAM 8 IN. DEPTH 473 FT. ALTITUDE OF LSD 400 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 285.53 FEET BELOW LAND SURFACE DATUM JAN 11. 1979.

LOWEST WATER LEVEL 285.53 FEET BELOW LAND SURFACE DATUM JAN 11. 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JAN 11. 1979	285.53

SITE NUMBER 324550115595201 LOCAL NUMBER 016S009E24D01S

ABOUT 2 MI NORTH OF OCOTILLO. BORED UNUSED WATER-TABLE WELL IN SAND AND CLAY OF QUATERNARY AGE. DIAM 2 IN. DEPTH 150 FT. CASED TO 145.5 FT. SAND POINT 145.5-149 FT. ALTITUDE OF LSD 382 FT. RECORDS AVAILABLE 1976 TO CURRENT YEAR.

HIGHEST WATER LEVEL 103.96 FEET BELOW LAND SURFACE DATUM APR 28. 1977.

LOWEST WATER LEVEL 131.00 FEET BELOW LAND SURFACE DATUM DEC 10. 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05. 1978	104.16	MAR 14. 1979	104.20	SEP 13. 1979	104.28

WATER QUALITY DATA

LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT
016S009E24D01S	79-03-15	1300	840	7.3	20.5	38	10	3.0	150	88

DATE OF SAMPLE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
79-03-15	11	4.0	110	140	80	1.0	15	481	400	10

IMPERIAL COUNTY--Continued

SITE NUMBER 324518115591501 LOCAL NUMBER 016S009E24R01S

ABOUT 1 MI NORTH OF OCOTILLO. BORED UNUSED WATER-TABLE WELL IN SAND AND CLAY OF QUATERNARY AGE. DIAM 2 IN, DEPTH 105 FT, CASED TO 101.5 FT, SAND POINT 98-101.5 FT. ALTITUDE OF LSD 335 FT. RECORDS AVAILABLE 1976 TO CURRENT YEAR.

HIGHEST WATER LEVEL 58.00 FEET BELOW LAND SURFACE DATUM NOV 17, 1976.

LOWEST WATER LEVEL 79.70 FEET BELOW LAND SURFACE DATUM NOV 10, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1978	58.74	MAR 14, 1979	58.52	SEP 13, 1979	59.00

WATER QUALITY DATA

LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT
016S009E24R01S	79-03-14	1415	670	7.7	27.5	56	14	5.0	110	79

DATE OF SAMPLE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
79-03-14	6.4	5.1	96	91	79	.9	23	394	300	20

SITE NUMBER 324603115480501 LOCAL NUMBER 016S011E23R01S

ABOUT 3.5 MI SOUTHEAST OF PLASTER CITY. AUGERED UNUSED WATER-TABLE WELL. DIAM 1.25 IN, DEPTH 127 FT IN 1964, 114.7 FT IN 1974. PERFORATED 121-123 FT. ALTITUDE OF LSD 30 FT. RECORDS AVAILABLE 1964, 1974, 1976 TO CURRENT YEAR.

HIGHEST WATER LEVEL 39.34 FEET BELOW LAND SURFACE DATUM APR 25, 1978.

LOWEST WATER LEVEL 101.17 FEET BELOW LAND SURFACE DATUM MAR 19, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1978	39.65	MAR 21, 1979	40.03	SEP 12, 1979	39.67

SITE NUMBER 372527118204601 LOCAL NUMBER 006S033E15M01M

ABOUT 1 MI NORTH OF LAWS. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN, DEPTH 113 FT, PERFORATED 91-111 FT. ALTITUDE OF LSD 4125.4 FT. MEASUREMENTS FURNISHED BY LOS ANGELES DEPARTMENT OF WATER AND POWER; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1928-77, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.00 FEET BELOW LAND SURFACE DATUM NOV 15, 1945.

LOWEST WATER LEVEL 40.97 FEET BELOW LAND SURFACE DATUM SEP 16, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
SEP 25, 1979	28.54

SITE NUMBER 372318118241101 LOCAL NUMBER 006S033E31D01M

ABOUT 1 MI NORTHWEST OF BISHOP. DRILLED UNUSED WATER-TABLE WELL. DIAM 16 IN, DEPTH 798 FT, CASED TO 785 FT, PERFORATED 34-46, 47-66, 68-86, 422-431, 440-449, 454-501, 600-630, 640-643, 681-701, 704-735, 742-750 FT. ALTITUDE OF LSD 4157.15 FT. MEASUREMENTS FURNISHED BY LOS ANGELES DEPARTMENT OF WATER AND POWER; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1929 TO CURRENT YEAR.

HIGHEST WATER LEVEL 2.19 FEET BELOW LAND SURFACE DATUM JUN 14, 1956.

LOWEST WATER LEVEL 13.14 FEET BELOW LAND SURFACE DATUM OCT 12, 1931.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 03, 1978	9.08	DEC 19, 1978	4.97	SEP 25, 1979	8.38

SITE NUMBER 372247118241101 LOCAL NUMBER 006S033E31M01M

ABOUT 0.74 MI SOUTH OF DIXON LANE AND 75 FT SOUTH OF BISHOP CREEK CANAL. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 16 IN, DEPTH 565 FT. PERFORATED 98-158, 560-565 FT. ALTITUDE OF LSD 4157.6 FT. RECORDS AVAILABLE 1928, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 5.00 FEET BELOW LAND SURFACE DATUM FEB 08, 1928.

LOWEST WATER LEVEL 6.89 FEET BELOW LAND SURFACE DATUM DEC 19, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 19, 1978	6.89	SEP 25, 1979	30.47 P

P Pumping.

SITE NUMBER 370616118150601 LOCAL NUMBER 010S034E03N01M

ABOUT 4.5 MI SOUTH OF BIG PINE. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 16 IN. DEPTH 322 FT. CASED TO 114 FT. PERFORATED 96-114 FT. ALTITUDE OF LSD 3879.0 FT. MEASUREMENTS FURNISHED BY LOS ANGELES DEPARTMENT OF WATER AND POWER; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1929 TO CURRENT YEAR.

HIGHEST WATER LEVEL 2.11 FEET BELOW LAND SURFACE DATUM JUL 23, 1969.

LOWEST WATER LEVEL 61.22 FEET BELOW LAND SURFACE DATUM SEP 15, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
SEP 25, 1979	47.72

SITE NUMBER 364802118105501 LOCAL NUMBER 013S035E16N01M

ABOUT 1.5 MI EAST OF INDEPENDENCE. DRILLED PUBLIC SUPPLY WATER-TABLE WELL IN ALLUVIUM. DIAM 16 IN. DEPTH 275.5 FT. PERFORATED 60-79, 91-275.5 FT. ALTITUDE OF LSD 3866.1 FT. MEASUREMENTS FURNISHED BY LOS ANGELES DEPARTMENT OF WATER AND POWER; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1944-60, 1964-71, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 10.53 FEET BELOW LAND SURFACE DATUM JAN 19, 1953.

LOWEST WATER LEVEL 56.50 FEET BELOW LAND SURFACE DATUM DEC 19, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 19, 1978	56.50	SEP 26, 1979	71.00 P

SITE NUMBER 364815118110401 LOCAL NUMBER 013S035E17J01M

EAST OF INDEPENDENCE. ABOUT 0.77 MI NORTH OF CITRUS ROAD. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 16 IN. DEPTH 376 FT. ALTITUDE OF LSD 368 FT. RECORDS AVAILABLE 1924, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 26.00 FEET BELOW LAND SURFACE DATUM MAY 16, 1924.

LOWEST WATER LEVEL 50.83 FEET BELOW LAND SURFACE DATUM SEP 26, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 19, 1978	47.22	SEP 26, 1979	50.83

P Pumping.

SITE NUMBER 364108117465701 LOCAL NUMBER 014S038E35H01M

ABOUT 12.2 MI SOUTHEAST OF WILLOW SPRINGS. DRILLED UNUSED WATER-TABLE WELL. DIAM 72 IN, DEPTH 37 FT. ALTITUDE OF LSD 1895 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 35.54 FEET BELOW LAND SURFACE DATUM MAY 21, 1980.

LOWEST WATER LEVEL 35.64 FEET BELOW LAND SURFACE DATUM SEP 26, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 08, 1979	35.60	SEP 26, 1979	35.64

SITE NUMBER 363555118041301 LOCAL NUMBER 015S036E28L01M

SOUTHWEST OF LONE PINE. DRILLED WATER-TABLE WELL. DIAM 16 IN, DEPTH 276 FT. PERFORATED 100-160 FT. ALTITUDE OF LSD 3773.6 FT. MEASUREMENTS FURNISHED BY LOS ANGELES DEPARTMENT OF WATER AND POWER; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1926 TO CURRENT YEAR.

HIGHEST WATER LEVEL 19.60 FEET BELOW LAND SURFACE DATUM AUG 28, 1961.

LOWEST WATER LEVEL 91.84 FEET BELOW LAND SURFACE DATUM OCT 12, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 19, 1978	44.96	SEP 25, 1979	43.27

SITE NUMBER 363621117091001 LOCAL NUMBER 015S044E36M01M

ABOUT 0.5 MI WEST OF STOVEPIPE WELLS HOTEL. DRILLED OBSERVATION WATER-TABLE WELL IN ALLUVIAL FAN DEPOSITS OF QUATERNARY AGE. DIAM 2 IN. DEPTH 43.8 FT. CASED TO 45.3 FT. SAND POINT 43.3-45.3 FT. ALTITUDE OF LSD -19.22 FT. RECORDS AVAILABLE 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 27.70 FEET BELOW LAND SURFACE DATUM APR 09, 1976.

LOWEST WATER LEVEL 28.20 FEET BELOW LAND SURFACE DATUM JUN 10, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 23, 1979	27.88	MAY 09, 1979	28.01	SEP 27, 1979	28.18

WATER QUALITY DATA

LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT
015S044E36M01M	79-05-09	1330	10400	7.5	31.0	740	80	130	2000	82

DATE OF SAMPLE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
79-05-09	32	160	380	990	3000	1.0	57	6500	15000	30

SITE NUMBER 360220117134701 LOCAL NUMBER 022S044E09D01M

ABOUT 0.43 MI WEST OF BALLARAT. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 6 IN. DEPTH 70 FT. ALTITUDE OF LSD 1040 FT. RECORDS AVAILABLE 1967, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 3.43 FEET BELOW LAND SURFACE DATUM JAN 23, 1979.

LOWEST WATER LEVEL 11.37 FEET BELOW LAND SURFACE DATUM SEP 12, 1967.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 23, 1979	3.43	SEP 27, 1979	5.06

SITE NUMBER [illegible] LOCAL NUMBER 024N038E33N01M

ABOUT 11 MI NORTH OF RIDGECREST. DUG UNUSED WATER-TABLE WELL. DIAM 18 IN. DEPTH 103 FT IN 1946, 101.9 FT IN 1952, 101.6 FT IN 1972. ALTITUDE OF LSD 2254.5 FT. RECORDS AVAILABLE 1928, 1946, 1952-56, 1959, 1961-66, 1968 TO CURRENT YEAR.

HIGHEST WATER LEVEL 58.88 FEET BELOW LAND SURFACE DATUM MAR 16, 1954.

LOWEST WATER LEVEL 62.05 FEET BELOW LAND SURFACE DATUM DEC 15, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 02, 1979	61.76

SITE NUMBER 355032115525201 LOCAL NUMBER 022N010E27N01S

ABOUT 1.4 MI WEST OF STATE LINE ON ROAD TO TECOPA. DRILLED UNUSED WATER-TABLE WELL. DIAM 20 IN. DEPTH 390.2 FT. ALTITUDE OF LSD 2660 FT. RECORDS AVAILABLE 1959, 1962, 1975-77, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 116.25 FEET BELOW LAND SURFACE DATUM FEB 03, 1959.

LOWEST WATER LEVEL 121.47 FEET BELOW LAND SURFACE DATUM JUL 11, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 11, 1979	121.47

SITE NUMBER [illegible] LOCAL NUMBER 020N008E21L02S

ABOUT 0.9 MI WEST OF STATE LINE ON HWY 178. DRILLED UNUSED WATER-TABLE WELL. DIAM 1.5 IN. DEPTH 61.8 FT. ALTITUDE OF LSD [illegible] FT. RECORDS AVAILABLE 1975-77, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 39.13 FEET BELOW LAND SURFACE DATUM FEB 18, 1976.

LOWEST WATER LEVEL 39.99 FEET BELOW LAND SURFACE DATUM JUL 11, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 11, 1979	39.99

INYO COUNTY--Continued

SITE NUMBER 361017116244701 LOCAL NUMBER 025N005E14N01S

NORTH EDGE OF DEATH VALLEY JUNCTION NEAR INTERSECTION OF HWYS 127 AND 190. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 12 IN. DEPTH 200 FT. PERFORATED 160-200 FT. ALTITUDE OF LSD 2030 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 3.20 FEET BELOW LAND SURFACE DATUM JAN 22, 1979.

LOWEST WATER LEVEL 5.50 FEET BELOW LAND SURFACE DATUM OCT 02, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JAN 22, 1979	3.20

SITE NUMBER 362711116494401 LOCAL NUMBER 027N001E24E01S

EAST OF FURNACE CREEK INN. DRILLED UNUSED WATER-TABLE WELL IN LACUSTRINE OF PLEISTOCENE AGE. DIAM 16 IN. DEPTH 250 FT. ALTITUDE OF LSD 400 FT. RECORDS AVAILABLE 1958-59, 1962, 1964, 1966-67, 1971-72, 1976, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 76.51 FEET BELOW LAND SURFACE DATUM NOV 26, 1958.

LOWEST WATER LEVEL 76.14 FEET BELOW LAND SURFACE DATUM JUN 16, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 24, 1979	75.97	MAY 09, 1979	76.00	SEP 20, 1979	76.00

KERN COUNTY

SITE NUMBER 354404117444501 LOCAL NUMBER 026S039E14Q01M

AT INYOKERN. DRILLED UNUSED WATER-TABLE WELL IN GRAVEL OF QUATERNARY AGE. DIAM 16 IN. DEPTH 371 FT. CASED TO 296 FT. ALTITUDE OF LSD 2414.3 FT. RECORDS AVAILABLE 1945, 1952-66, 1968-73, 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 207.50 FEET BELOW LAND SURFACE DATUM SEP 07, 1945.

LOWEST WATER LEVEL 295.40 FEET BELOW LAND SURFACE DATUM NOV 09, 1966.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 05, 1979	280.06

KERN COUNTY--Continued

SITE NUMBER 353922117442301 LOCAL NUMBER 026S039E24M01M

ABOUT 4 MI NORTHWEST OF RIDGECREST. DRILLED UNUSED WATER-TABLE WELL. DIAM 16 IN. DEPTH 1043 FT. FILLED IN WITH GRAVEL PACK TO 400 FT. ALTITUDE OF LSD 2300.00 FT. RECORDS AVAILABLE 1960, 1962-67, 1970-71, 1973, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 172.07 FEET BELOW LAND SURFACE DATUM NOV 09, 1960.

LOWEST WATER LEVEL 216.60 FEET BELOW LAND SURFACE DATUM DEC 09, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 09, 1978	216.60

SITE NUMBER 353908117395201 LOCAL NUMBER 026S040E22P01M

AT CHINA LAKE. DRILLED UNUSED WATER-TABLE WELL IN SAND OF QUATERNARY AGE. DIAM 8 IN. DEPTH 1350 FT. PERFORATED 530-830 FT. ALTITUDE OF LSD 2250.7 FT. RECORDS AVAILABLE 1956 TO CURRENT YEAR.

HIGHEST WATER LEVEL 64.28 FEET BELOW LAND SURFACE DATUM MAY 13, 1956.

LOWEST WATER LEVEL 91.02 FEET BELOW LAND SURFACE DATUM DEC 07, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 29, 1978	90.10	MAY 17, 1979	89.58

WATER QUALITY DATA

LOCAL IDENT- I- FIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
026S040E22P01M	79-05-17	1530	1375	9.0	29.0	6	0	2.1	.3	340

DATE OF SAMPLE	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
79-05-17	98	58	5.2	540	5.3	160	2.5	5.1	827	.00	.09	.28

DATE OF SAMPLE	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
79-05-17	1900	60

SITE NUMBER 353044117424401 LOCAL NUMBER 026S040E30K02M

SOUTHEAST OF INYOKERN HWY AND JACK RANCH ROAD INTERSECTION. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 16 IN. DEPTH 802 FT. PERFORATED 220-470, 600-760 FT. ALTITUDE OF LSD 2340 FT. RECORDS AVAILABLE 1966-1971, 1976 TO CURRENT YEAR.

HIGHEST WATER LEVEL 103.43 FEET BELOW LAND SURFACE DATUM OCT 13, 1972.

LOWEST WATER LEVEL 206.30 FEET BELOW LAND SURFACE DATUM DEC 07, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 27, 1978	206.30

SITE NUMBER 353944117380601 LOCAL NUMBER 027S040E02J01M

SOUTHEAST OF RIDGECREST. DRILLED IRRIGATION WATER-TABLE WELL. DIAM 10 IN. DEPTH 220 FT. ALTITUDE OF LSD 2300 FT. RECORDS AVAILABLE 1950, 1960-62, 1964-66, 1968, 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 104.36 FEET BELOW LAND SURFACE DATUM JAN 21, 1960.

LOWEST WATER LEVEL 126.87 FEET BELOW LAND SURFACE DATUM SEP 08, 1966.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 30, 1978	110.62	JUN 01, 1979	119.22

SITE NUMBER 351800117575901 LOCAL NUMBER 029S039E33K01M

NORTHEAST OF CANTIL. DRILLED UNUSED WATER-TABLE WELL IN SAND OF QUATERNARY AGE. DIAM 16 IN. DEPTH 611.6 FT. CASED TO 602 FT. PERFORATED 210-602 FT. ALTITUDE OF LSD 2050 FT. RECORDS AVAILABLE 1950, 1976, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 131.10 FEET BELOW LAND SURFACE DATUM FEB 13, 1950.

LOWEST WATER LEVEL 211.00 FEET BELOW LAND SURFACE DATUM APR 17, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 06, 1978	170.50	FEB 13, 1979	171.43

SITE NUMBER 350701117540401 LOCAL NUMBER 032S037E26M01M

IN CALIFORNIA CITY. DRILLED IRRIGATION WATER-TABLE WELL. DIAM 16 IN. DEPTH 598 FT. ALTITUDE OF LSD 2420 FT.

WATER QUALITY DATA

LOCAL IDENT- I- FIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT
032S037E26M01M	79-06-25	0955	798	7.7	23.5	94	26	7.0	140	76

DATE OF SAMPLE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
79-06-25	6.3	2.0	180	96	88	1.6	26	490	500	0

SITE NUMBER 345451117503501 LOCAL NUMBER 010N009W36D01S

NORTHEAST OF ROSAMOND BLVD AND LAKE SHORE DRIVE, AT NORTH END OF RODGERS LANE. DRILLED UNUSED WATER-TABLE WELL IN LAKESHORE DEPOSITS. DIAM 12 IN. DEPTH 502 FT. CASED TO 500 FT. PERFORATED 144-195, 205-433 FT. ALTITUDE OF LSD 2280 FT. RECORDS AVAILABLE 1957 TO CURRENT YEAR.

HIGHEST WATER LEVEL 94.21 FEET BELOW LAND SURFACE DATUM JUL 08, 1958.

LOWEST WATER LEVEL 117.40 FEET BELOW LAND SURFACE DATUM OCT 24, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17, 1978	116.32	FEB 16, 1979	115.66

SITE NUMBER 345914118172601 LOCAL NUMBER 010N013W32D01S

ABOUT 7.0 MI NORTH OF WILLOW SPRINGS. DRILLED IRRIGATION WATER-TABLE WELL. DIAM 16 IN. DEPTH 900 FT. ALTITUDE OF LSD 2775 FT.

WATER QUALITY DATA

LOCAL IDENT- I- FIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT
010N013W32D01S	79-06-26	1350	510	7.9	22.5	160	46	10	50	41

DATE OF SAMPLE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
79-06-26	2.0	2.0	180	68	16	.3	32	325	100	0

KERN COUNTY--Continued

SITE NUMBER 350411118023601 LOCAL NUMBER 011N011W09A01S

NORTHEAST OF MOJAVE. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 14 IN. DEPTH 422 FT. CASED TO 422 FT. PERFORATED 262-295. 352-362 FT. ALTITUDE OF LSD 2564.6 FT. RECORDS AVAILABLE 1956-58. 1967 TO CURRENT YEAR.

HIGHEST WATER LEVEL 124.59 FEET BELOW LAND SURFACE DATUM OCT 17. 1956.

LOWEST WATER LEVEL 130.04 FEET BELOW LAND SURFACE DATUM APR 14. 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 16. 1978	129.24	FEB 14. 1979	129.67

SITE NUMBER 350055118172401 LOCAL NUMBER 011N013W29H01S

WEST OF MOJAVE. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 16 IN. DEPTH 749 FT. CASED TO 744 FT. PERFORATED 520-724 FT. ALTITUDE OF LSD 3350 FT. RECORDS AVAILABLE 1954-56. 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 300.00 FEET BELOW LAND SURFACE DATUM FEB 04. 1954.

LOWEST WATER LEVEL 336.19 FEET BELOW LAND SURFACE DATUM OCT 17. 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17. 1978	336.19	DEC 06. 1978	335.68	FEB 14. 1979	332.64

LOS ANGELES COUNTY

SITE NUMBER 343258117593101 LOCAL NUMBER 005N011W01M01S

NORTHWEST OF 80TH STREET EAST AND AVENUE T INTERSECTION. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 16 IN. DEPTH 416 FT IN 1963. 396.29 FT IN 1967. CASED TO 392 FT. PERFORATED 109-366 FT. ALTITUDE OF LSD 2734.5 FT. RECORDS AVAILABLE 1954. 1963. 1967-68. 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 66.48 FEET BELOW LAND SURFACE DATUM APR 10. 1980.

LOWEST WATER LEVEL 111.17 FEET BELOW LAND SURFACE DATUM OCT 11. 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18. 1978	104.79	FEB 20. 1979	77.95

SITE NUMBER 342818118114501 LOCAL NUMBER 005N013W36L01S

IN ACTON, NEAR INTERSECTION OF CROWN VALLEY ROAD AND SYRACUSE AVENUE. DRILLED INSTITUTION WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 12 IN. DEPTH 122 FT. ALTITUDE OF LSD 2700 FT. RECORDS AVAILABLE 1958, 1965, 1974-75, 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 30.81 FEET BELOW LAND SURFACE DATUM MAR 13, 1980.

LOWEST WATER LEVEL 88.56 FEET BELOW LAND SURFACE DATUM OCT 07, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
FEB 26, 1979	47.50

WATER QUALITY DATA

LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT
005N013W36L01S	79-04-27	0765	600	7.2	17.5	220	60	18	50	36

DATE OF SAMPLE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
79-04-27	1.7	1.6	190	61	61	.3	43	455	280	30

SITE NUMBER 343434117500801 LOCAL NUMBER 006N009W28P02S

ABOUT 0.25 MI SOUTH OF PALMDALE BLVD AND 275 FT WEST OF 65TH STREET. DRILLED IRRIGATION WATER-TABLE WELL. DIAM 16 IN. DEPTH 797 FT. ALTITUDE OF LSD 2800 FT.

WATER QUALITY DATA

LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT
006N009W28P02S	79-04-23	1210	650	7.8	25.0	160	47	10	77	51

DATE OF SAMPLE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
79-04-23	2.7	2.9	100	170	32	1.1	26	446	390	30

SITE NUMBER 344150118055401 LOCAL NUMBER 007N012W13H02S

WEST OF 20TH STREET EAST AND NORTH OF LANCASTER BLVD. DOMESTIC WATER-TABLE WELL. DIAM 8 IN. DEPTH 218 FT. ALTITUDE OF LSD 2305 FT. RECORDS AVAILABLE 1963, 1967 TO CURRENT YEAR.

HIGHEST WATER LEVEL 113.95 FEET BELOW LAND SURFACE DATUM SEP 25, 1963.

LOWEST WATER LEVEL 143.50 FEET BELOW LAND SURFACE DATUM OCT 23, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18, 1978	141.37	FEB 13, 1979	141.86

SITE NUMBER 344200118141001 LOCAL NUMBER 007N013W14E01S

ABOUT 0.3 MI SOUTH OF INTERSECTION OF 60TH STREET AND AVENUE I. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 14 IN. DEPTH 930 FT. ALTITUDE OF LSD 2350 FT.

WATER QUALITY DATA

LOCAL IDENT- I- FIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT
007N013W14E01S	79-04-24	0835	440	7.7	21.5	150	45	8.0	38	36

DATE OF SAMPLE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
79-04-24	1.4	1.4	120	39	38	.2	35	291	0	30

SITE NUMBER 344441118335001 LOCAL NUMBER 008N016W03F01S

NORTH OF AVENUE D AND WEST OF 240TH STREET WEST. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 1.5 TO 2 IN. DEPTH 326 FT. 1.5-IN CSG 0-295.5 FT. 2-IN CSG 295.5-326 FT. PERFORATED 317-326 FT. ALTITUDE OF LSD 2435 FT. RECORDS AVAILABLE 1965, 1967 TO CURRENT YEAR.

HIGHEST WATER LEVEL 191.46 FEET BELOW LAND SURFACE DATUM APR 13, 1965.

LOWEST WATER LEVEL 220.29 FEET BELOW LAND SURFACE DATUM OCT 23, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 27, 1978	219.54	FEB 22, 1979	219.30

SITE NUMBER 340535117573501 LOCAL NUMBER 001S010W07R02S

NEAR INTERSECTION OF LOS ANGELES AND MAINE STREETS IN BALDWIN PARK. DRILLED OBSERVATION WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE. DIAM 16 IN, DEPTH 200 FT, PERFORATED 74-174, 181-196 FT. ALTITUDE OF LSD 387 FT. RECORDS AVAILABLE 1932 TO CURRENT YEAR. COMPARABLE RECORDS 1903-32 AS PUBLISHED IN PREVIOUS WATER-SUPPLY PAPERS WERE FOR WELL 42(001S010W18A01S).

HIGHEST WATER LEVEL 62.40 FEET BELOW LAND SURFACE DATUM MAY 31, 1943.

LOWEST WATER LEVEL 183.79 FEET BELOW LAND SURFACE DATUM DEC 22, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM,

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25, 1978	130.98	JAN 23, 1979	131.89	APR 25, 1979	121.27	JUL 17, 1979	122.76
NOV 22	130.95	FEB 20	129.03	MAY 18	118.62	AUG 22	127.56
DEC 28	132.50	MAR 26	126.72	JUN 21	119.54	SEP 24	132.09

SITE NUMBER 334905118124601 LOCAL NUMBER 004S013W23B02S

PREVIOUSLY PUBLISHED AS 4S/13W-23G2. IN LONG BEACH, NEAR INTERSECTION OF 32ND AND DELTA STREETS. DRILLED UNUSED ARTESIAN WELL IN GRAVEL IN UPPERMOST PART OF SILVERADO WATER-BEARING ZONE OF PLEISTOCENE AGE. DIAM 26 TO 16 IN, DEPTH 1074 FT, 26-IN CSG 0-288 FT, 16-IN CSG 288-1068 FT, PERFORATED 650-900 FT. ALTITUDE OF LSD 24.1 FT. MEASUREMENTS FURNISHED BY CITY OF LONG BEACH. RECORDS AVAILABLE 1932 TO CURRENT YEAR.

HIGHEST WATER LEVEL 52.91 FEET BELOW LAND SURFACE DATUM FEB 06, 1939.

LOWEST WATER LEVEL 131.75 FEET BELOW LAND SURFACE DATUM JAN 20, 1953.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM,

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20, 1978	115.98	JAN 18, 1979	114.48	MAY 18, 1979	110.98	AUG 24, 1979	114.38
NOV 28	116.60	FEB 20	119.98	JUN 18	116.78	SEP 27	112.38
DEC 21	121.08	APR 25	111.78	JUL 26	112.58		

MONO COUNTY

SITE NUMBER 375332119054401 LOCAL NUMBER 001S026E03C01M

ABOUT 0.24 MI WEST OF HWY 395 AND 2 MI NORTH OF JUNE LAKE LOOP ROAD EXIT. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 8 TO 6.6 IN, DEPTH 120 FT IN 1958, DEEPENED TO 358 FT IN 1965, 8-IN CSG 0-120 FT, 6.6-IN CSG 75-305 FT, PERFORATED 78-85, 120-135, 150-170, 210-250, 270-290 FT, OPEN HOLE 305-358 FT. ALTITUDE OF LSD 6880 FT. RECORDS AVAILABLE 1965, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 33.40 FEET BELOW LAND SURFACE DATUM MAY 22, 1980.

LOWEST WATER LEVEL 119. FEET BELOW LAND SURFACE DATUM AUG 26, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM,

DATE	WATER LEVEL
APR 19, 1979	70.77 P

P Pumping.

MONO COUNTY--Continued

SITE NUMBER 374334118491401 LOCAL NUMBER 002S029E31P01M

ABOUT 8 MI NORTH OF HWY 395, NEAR LAKE CROWLEY. UNUSED WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 30 IN, DEPTH 7.65 FT. ALTITUDE OF LSD 6915 FT. RECORDS AVAILABLE 1966, 1972-73, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.97 FEET BELOW LAND SURFACE DATUM MAY 22, 1980.

LOWEST WATER LEVEL 6.00 FEET BELOW LAND SURFACE DATUM JUN 13, 1966.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
SEP 25, 1979	4.56

ORANGE COUNTY

SITE NUMBER 335459117580701 LOCAL NUMBER 003S010W18C01S

NEAR INTERSECTION OF IMPERIAL HWY AND BEACH BLVD. UNUSED WATER-TABLE WELL. DIAM 26.25 TO 14.25 IN. DEPTH 385 FT. 26.25-IN CSG 0-24 FT, 14.25-IN CSG 0-385 FT, PERFORATED 144-385 FT. ALTITUDE OF LSD 211 FT. MEASUREMENTS FURNISHED BY ORANGE COUNTY FLOOD CONTROL DISTRICT 1961-77; MEASUREMENTS BY U.S. GEOLOGICAL SURVEY 1978 TO CURRENT YEAR. RECORDS AVAILABLE 1961 TO CURRENT YEAR.

HIGHEST WATER LEVEL 91.37 FEET BELOW LAND SURFACE DATUM JUN 12, 1980.

LOWEST WATER LEVEL 127.80 FEET BELOW LAND SURFACE DATUM OCT 29, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 1978	92.96	FEB 02, 1979	94.69	MAY 01, 1979	93.86	JUL 30, 1979	93.09

SITE NUMBER 334900117502301 LOCAL NUMBER 004S009W17Q01S

NEAR INTERSECTION OF TUSTIN AND TAFT AVENUES. UNUSED WATER-TABLE WELL. DIAM 10 IN, DEPTH UNKNOWN. ALTITUDE OF LSD 239 FT. MEASUREMENTS FURNISHED BY ORANGE COUNTY FLOOD CONTROL DISTRICT 1930-77; MEASUREMENTS BY U.S. GEOLOGICAL SURVEY 1978 TO CURRENT YEAR. RECORDS AVAILABLE 1932-35, 1937 TO CURRENT YEAR.

HIGHEST WATER LEVEL 146.21 FEET BELOW LAND SURFACE DATUM JUN 11, 1980.

LOWEST WATER LEVEL 241.34 FEET BELOW LAND SURFACE DATUM OCT 19, 1951.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03, 1978	172.79	FEB 06, 1979	173.28	MAY 01, 1979	169.87

ORANGE COUNTY--Continued

SITE NUMBER 334404117480701 LOCAL NUMBER 005S009W15R03S

NEAR INTERSECTION OF BRYAN AND BROWNING STREETS. UNUSED WATER-TABLE WELL. DIAM 16 IN, DEPTH 787 FT. ALTITUDE OF LSD 96.7 FT. MEASUREMENTS FURNISHED BY ORANGE COUNTY FLOOD CONTROL DISTRICT 1969-76; MEASUREMENTS BY U.S. GEOLOGICAL SURVEY 1978 TO CURRENT YEAR. RECORDS AVAILABLE 1969-76, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 19.20 FEET BELOW LAND SURFACE DATUM JUL 02, 1975.

LOWEST WATER LEVEL 32.60 FEET BELOW LAND SURFACE DATUM OCT 22, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31, 1978	25.24	FEB 06, 1979	23.20	MAY 01, 1979	20.70	JUL 31, 1979	20.03

RIVERSIDE COUNTY

SITE NUMBER 340300114473301 LOCAL NUMBER 001S021E32B01S

ABOUT 1.5 MI SOUTHEAST OF OLD RICE AIR BASE. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 16 IN, DEPTH 175 FT IN 1962, 160.85 FT IN 1979. PERFORATED 135-175 FT. ALTITUDE OF LSD 740 FT. RECORDS AVAILABLE 1962-67, 1969, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 150.54 FEET BELOW LAND SURFACE DATUM JUL 19, 1979.

LOWEST WATER LEVEL 152.74 FEET BELOW LAND SURFACE DATUM MAR 18, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 19, 1979	150.54

SITE NUMBER 335304116353001 LOCAL NUMBER 003S004E29F01S

NEAR HWY 111 NORTHWEST OF PALM SPRINGS. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 3 IN. DEPTH 575 FT. CASED TO 575 FT. PERFORATED 555-575 FT. ALTITUDE OF LSD 885 FT. RECORDS AVAILABLE 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 463.00 FEET BELOW LAND SURFACE DATUM DEC 13, 1979.

LOWEST WATER LEVEL 547.00 FEET BELOW LAND SURFACE DATUM DEC 21, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 1978	489.83	APR 19, 1979	467.75	JUN 26, 1979	480.10	SEP 19, 1979	470.60
DEC 21	492.20						

WATER QUALITY DATA

LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
003S004E29F01S	78-10-03	1300	440	9.4	23.5	71	--	22	4.0	56
	79-01-02	1240	380	10.3	20.0	14	0	5.1	.4	70
	79-04-19	1145	340	10.4	22.0	20	--	8.0	.0	52
	79-06-26	1300	340	9.9	23.0	18	--	7.0	.0	48
	79-09-20	0850	320	10.0	21.0	15	15	6.0	.0	46

DATE OF SAMPLE	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
78-10-03	61	2.9	6.2	92	76	23	.7	1.0	--	188	.46	.01
79-01-02	72	8.0	34	--	35	16	.0	.4	--	216	.09	.00
79-04-19	80	5.1	5.9	79	40	15	.4	.0	170	--	--	--
79-06-26	81	5.0	5.6	--	34	16	.4	1.0	165	--	--	--
79-09-20	82	5.2	5.6	75	28	13	.4	.0	141	144	--	--

DATE OF SAMPLE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
78-10-03	.03	60	20
79-01-02	.00	50	10
79-04-19	--	0	0
79-06-26	--	0	0
79-09-20	--	0	10

SITE NUMBER 335231116345401 LOCAL NUMBER 003S004E29R01S

NEAR HWY 111 NORTHWEST OF PALM SPRINGS. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 8 IN. DEPTH 551 FT, CASED TO 551 FT, PERFORATED 431-551 FT. ALTITUDE OF LSD 777 FT. RECORDS AVAILABLE 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 471.79 FEET BELOW LAND SURFACE DATUM SEP 19, 1979.

LOWEST WATER LEVEL 516.39 FEET BELOW LAND SURFACE DATUM MAR 14, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 1978	501.14	APR 18, 1979	485.42	JUN 26, 1979	484.03	SEP 19, 1979	471.79
DEC 21	493.79						

WATER QUALITY DATA

LOCAL IDENT- I- FIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
003S004E29R01S	78-10-03	1420	365	7.5	23.5	140	19	45	6.4	20
	78-12-21	1420	325	7.4	19.5	160	55	54	7.2	20
	79-04-18	1610	345	7.2	20.5	140	--	44	6.0	19
	79-06-26	0945	335	8.4	23.0	130	--	40	6.0	19
	79-09-19	1600	330	7.3	21.5	120	--	39	6.0	19

DATE OF SAMPLE	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
78-10-03	23	.7	4.2	120	39	11	.8	19	--	219	1.4	.01
78-12-21	20	.7	4.4	110	43	36	.6	20	--	258	1.4	.01
79-04-18	23	.7	3.8	120	40	10	.8	22	226	--	--	--
79-06-26	24	.7	4.0	--	34	6.0	.8	20	211	--	--	--
79-09-19	25	.7	3.9	130	30	5.0	.8	20	203	203	--	--

DATE OF SAMPLE	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
78-10-03	.03	50	20
78-12-21	.03	100	440
79-04-18	--	0	10
79-06-26	--	0	20
79-09-19	--	0	40

RIVERSIDE COUNTY--Continued

SITE NUMBER 335612115243301 LOCAL NUMBER 003S015E04J01S

ABOUT 16 MI NORTH OF DESERT CENTER. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 16 IN. DEPTH 575 FT. ALTITUDE OF LSD 1080.6 FT. RECORDS AVAILABLE 1954-67, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 150.00 FEET BELOW LAND SURFACE DATUM DEC 04, 1954.

LOWEST WATER LEVEL 167.72 FEET BELOW LAND SURFACE DATUM FEB 25, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11, 1978	169.75 S	APR 09, 1979	168.65 S

SITE NUMBER 335503114490201 LOCAL NUMBER 003S021E18D01S

ABOUT 4.5 MI NORTH-NORTHWEST OF MIDLAND. UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 16 IN. DEPTH 371 FT. ALTITUDE OF LSD 885 FT. RECORDS AVAILABLE 1962, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 284.99 FEET BELOW LAND SURFACE DATUM MAR 29, 1962.

LOWEST WATER LEVEL 285.63 FEET BELOW LAND SURFACE DATUM APR 24, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 24, 1979	285.63	JUL 27, 1979	285.53

S Nearby, pumping.

SITE NUMBER 334712115485601 LOCAL NUMBER 004S011E27Q01S

ABOUT 3.5 MI NORTH OF COTTONWOOD SPRING, IN SMOKETREE WASH. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 TO 10 IN. DEPTH 403 FT. 12-IN CSG 0-232 FT. 10-IN CSG 209-403 FT. PERFORATED 212-228, 209-398 FT. ALTITUDE OF LSD 2975 FT. RECORDS AVAILABLE 1958-61, 1963 TO CURRENT YEAR.

HIGHEST WATER LEVEL 170.29 FEET BELOW LAND SURFACE DATUM MAR 12, 1959.

LOWEST WATER LEVEL 194.40 FEET BELOW LAND SURFACE DATUM APR 11, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11, 1978	190.00	APR 11, 1979	194.40

WATER QUALITY DATA

LOCAL IDENT- I- FIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT
004S011E27Q01S	78-10-11	1500	435	7.5	26.0	130	41	7.2	41	40

DATE OF SAMPLE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	BORON, DIS- SOLVED (UG/L AS B)
78-10-11	1.6	2.0	120	27	40	2.4	31	264	1.6	.01	.03	190

DATE OF SAMPLE	IRON, DIS- SOLVED (UG/L AS FE)
78-10-11	20

SITE NUMBER 334647115195801 LOCAL NUMBER 004S016E32M01S

ABOUT 6.3 MI NORTHEAST OF DESERT CENTER. DRILLED UNUSED WATER-TABLE WELL. DIAM 14 IN. DEPTH 555 FT. ALTITUDE OF LSD 548 FT. RECORDS AVAILABLE 1961-62, 1970, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 66.95 FEET BELOW LAND SURFACE DATUM APR 19, 1979.

LOWEST WATER LEVEL 79.95 FEET BELOW LAND SURFACE DATUM AUG 24, 1962.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 19, 1979	66.95

SITE NUMBER 335133115141901 LOCAL NUMBER 004S017E06C01S

ABOUT 13.5 MI NORTHEAST OF DESERT CENTER. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM. DIAM 16 IN, DEPTH 501 FT. ALTITUDE OF LSD 500 FT. RECORDS AVAILABLE 1932, 1952, 1954, 1956-57, 1959, 1961-71, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 21.00 FEET BELOW LAND SURFACE DATUM MAY 21, 1952.

LOWEST WATER LEVEL 25.02 FEET BELOW LAND SURFACE DATUM APR 23, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 25, 1979	23.88

SITE NUMBER 333717114363401 LOCAL NUMBER 006S023E30K01S

ABOUT 1.5 MI NORTHWEST OF BLYTHE. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 12 IN, DEPTH 712 FT, CASED TO 712 FT, PERFORATED 620-648, 670-690 FT. ALTITUDE OF LSD 369 FT. RECORDS AVAILABLE 1977, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 9.45 FEET BELOW LAND SURFACE DATUM JUN 27, 1979.

LOWEST WATER LEVEL 10. FEET BELOW LAND SURFACE DATUM OCT 04, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUN 27, 1979	9.45

SITE NUMBER 333640114330201 LOCAL NUMBER 006S023E35E01S

ABOUT 2 MI EAST OF EAST BLYTHE. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN, DEPTH 365.5 FT. ALTITUDE OF LSD 267 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 9.04 FEET BELOW LAND SURFACE DATUM JUL 26, 1979.

LOWEST WATER LEVEL 9.04 FEET BELOW LAND SURFACE DATUM JUL 26, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 26, 1979	9.04

SITE NUMBER 333340114552801 LOCAL NUMBER 007S020E18H01S

ABOUT 6.9 MI NORTH-NORTHWEST OF WILEYS WELL. DRILLED UNUSED WATER-TABLE WELL. DIAM 14 TO 12 IN. DEPTH 1139 FT. 14-IN CSG 0-343 FT. 12-IN CSG 343-1083 FT. PERFORATED 853-1083 FT. ALTITUDE OF LSD 445 FT. RECORDS AVAILABLE 1961, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 168.37 FEET BELOW LAND SURFACE DATUM APR 05, 1961.

LOWEST WATER LEVEL 173.48 FEET BELOW LAND SURFACE DATUM JUL 31, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 31, 1979	173.48

SITE NUMBER 333609114345701 LOCAL NUMBER 007S023E04D01S

ABOUT 1.3 MI SOUTHEAST OF BLYTHE. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN, DEPTH 502 FT, CASED TO 500 FT. PERFORATED 270-290, 334-344 FT. ALTITUDE OF LSD 268 FT. RECORDS AVAILABLE 1973, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 11.5 FEET BELOW LAND SURFACE DATUM JUL 26, 1979.

LOWEST WATER LEVEL 13. FEET BELOW LAND SURFACE DATUM MAY 09, 1973.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 26, 1979	11.5

SITE NUMBER 333030114412501 LOCAL NUMBER 008S022E04N02S

ABOUT 0.7 MI SOUTHWEST OF RIPLEY. UNUSED WATER-TABLE WELL. DIAM 0.75 IN, DEPTH 13.6 FT. ALTITUDE OF LSD 242 FT. MEASUREMENTS PRIOR TO 8/31/71 FURNISHED BY PALO VERDE IRRIGATION DISTRICT. RECORDS AVAILABLE 1923-26, 1936-37, 1948-71, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 4.11 FEET BELOW LAND SURFACE DATUM SEP 10, 1959.

LOWEST WATER LEVEL 12.75 FEET BELOW LAND SURFACE DATUM JAN 21, 1970.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 24, 1979	11.35

SITE NUMBER 335512117080001 LOCAL NUMBER 003S002W07P01S

EAST OF INTERSECTION OF THEODORE STREET AND ALESSANDRO BLVD. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN, DEPTH 350 FT. ALTITUDE OF LSD 1590 FT. MEASUREMENTS FURNISHED BY RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1939-48, 1951-55, 1962 TO CURRENT YEAR.

HIGHEST WATER LEVEL 101.80 FEET BELOW LAND SURFACE DATUM JAN 21, 1943.

LOWEST WATER LEVEL 145.30 FEET BELOW LAND SURFACE DATUM OCT 05, 1971.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 16, 1978	110.10	APR 24, 1979	109.90	AUG 30, 1979	110.00

SITE NUMBER 335437117110101 LOCAL NUMBER 003S003W15F01S

WEST OF INTERSECTION OF OLIVER STREET AND CACTUS AVENUE. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN, DEPTH 243.6 FT. ALTITUDE OF LSD 1539 FT. MEASUREMENTS FURNISHED BY RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1951 TO CURRENT YEAR.

HIGHEST WATER LEVEL 99.85 FEET BELOW LAND SURFACE DATUM APR 01, 1952.

LOWEST WATER LEVEL 159.09 FEET BELOW LAND SURFACE DATUM OCT 23, 1956.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 16, 1978	118.70	APR 24, 1979	114.00	AUG 30, 1979	113.92

SITE NUMBER 332653117050301 LOCAL NUMBER 008S002W28R01S

SOUTHEAST OF TEMECULA ON PECHANGA INDIAN RESERVATION. DRILLED UNUSED WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE. DIAM 12.25 IN. DEPTH 1002 FT. CASED TO 1000 FT. PERFORATED 130-220, 250-350, 400-710, 750-780, 830-870, 930-940, 975-1000 FT. ALTITUDE OF LSD 1190 FT. RECORDS AVAILABLE 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 46.86 FEET BELOW LAND SURFACE DATUM APR 08, 1980.

LOWEST WATER LEVEL 133.50 FEET BELOW LAND SURFACE DATUM DEC 18, 1973.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03, 1978	100.46 P	MAR 21, 1979	73.47	JUN 12, 1979	79.08	SEP 06, 1979	87.62
JAN 09, 1979	72.32	APR 11	76.45	JUL 12	92.79		
FEB 06	69.98	MAY 09	92.82	AUG 09	99.41		

WATER QUALITY DATA

LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT
008S002W28R01S	79-07-19	1245	390	7.8	20.0	88	32	2.0	52	56

DATE OF SAMPLE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	BORON, DIS-SOLVED (UG/L AS B)
79-07-19	2.4	.9	11	20	.7	25	247	0

SITE NUMBER 332719117061501 LOCAL NUMBER 008S002W29G01S

SOUTHEAST OF TEMECULA ON PECHANGA INDIAN RESERVATION. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN. DEPTH 176 FT IN 1951, 159.1 FT IN 1972. ALTITUDE OF LSD 1091.1 FT. RECORDS AVAILABLE 1925-28, 1934-37, 1940, 1951-54, 1956, 1958-68, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 17.70 FEET BELOW LAND SURFACE DATUM APR 08, 1980.

LOWEST WATER LEVEL 55.40 FEET BELOW LAND SURFACE DATUM SEP 03, 1951.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03, 1978	30.03	JAN 09, 1979	29.74	APR 11, 1979	24.97	JUL 16, 1979	23.88
NOV 02	29.46	FEB 08	28.47	MAY 09	23.75	AUG 09	24.33
30	29.87	MAR 13	26.99	JUN 12	23.83	SEP 06	24.92
DEC 12	29.92	21	26.62	JUL 12	23.76		

P Pumping.

SITE NUMBER 340445116125001 LOCAL NUMBER 001N007E23A01S

ABOUT 1.9 MI EAST OF SUNFAIR. DRILLED UNUSED WATER-TABLE WELL. DIAM 10 IN. DEPTH 368.5 FT. PERFORATED 360-370 FT. ALTITUDE OF LSD 2376 FT. RECORDS AVAILABLE 1969, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 209.96 FEET BELOW LAND SURFACE DATUM JAN 09, 1980.

LOWEST WATER LEVEL 211.35 FEET BELOW LAND SURFACE DATUM MAY 30, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 1978	210.45	MAR 07, 1979	210.41	MAY 30, 1979	211.35	AUG 22, 1979	210.26
DEC 19	210.58	19	210.43	JUN 13	210.31	SEP 19	210.27
JAN 17, 1979	210.50	APR 04	210.59	27	210.36		
FEB 08	210.60	MAY 03	210.49	JUL 24	210.20		

SITE NUMBER 340934115451501 LOCAL NUMBER 001N012E20D01S

ABOUT 30.2 MI WEST OF AMBOY. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM OF PLEISTOCENE AGE. DIAM 12 IN. DEPTH 260 FT. PERFORATED 34-248 FT. ALTITUDE OF LSD 1211.3 FT. RECORDS AVAILABLE 1946, 1950-59, 1961-67, 1969-70, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 26.80 FEET BELOW LAND SURFACE DATUM JUL 06, 1978.

LOWEST WATER LEVEL 45.83 FEET BELOW LAND SURFACE DATUM APR 09, 1948.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 19, 1979	27.27

SITE NUMBER 340933115451101 LOCAL NUMBER 001N012E20D04S

NEAR AMBOY ROAD, ABOUT 1.5 MI NORTHWEST OF DALE LAKE. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN. DEPTH 1190 FT. PERFORATED 65-200 FT. ALTITUDE OF LSD 1212.4 FT. RECORDS AVAILABLE 1940, 1954, 1959-67, 1969-70, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 27.04 FEET BELOW LAND SURFACE DATUM MAR 18, 1964.

LOWEST WATER LEVEL 33.50 FEET BELOW LAND SURFACE DATUM JUL 01, 1940.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 25, 1979	27.60

SITE NUMBER 341140114353601 LOCAL NUMBER 001N023E08D01S

ABOUT 1.5 MI WEST OF VIDAL JUNCTION. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 16 IN, DEPTH 502.7 FT. PERFORATED 296-336, 475-603 FT. ALTITUDE OF LSD 960 FT. RECORDS AVAILABLE 1962-67, 1969, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 263.08 FEET BELOW LAND SURFACE DATUM APR 24, 1979.

LOWEST WATER LEVEL 268.1 FEET BELOW LAND SURFACE DATUM NOV 17, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 24, 1979	263.08	JUL 29, 1979	267.33

SITE NUMBER 341345116234701 LOCAL NUMBER 002N006E30L01S

ABOUT 20 MI NORTHWEST OF TWENTYNINE PALMS. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM. DIAM 6 IN, DEPTH 377 FT. ALTITUDE OF LSD 3328 FT. RECORDS AVAILABLE 1958, 1966-71, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 311.65 FEET BELOW LAND SURFACE DATUM MAY 22, 1958.

LOWEST WATER LEVEL 359.04 FEET BELOW LAND SURFACE DATUM APR 21, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 19, 1979	333.15

SITE NUMBER 341520116130101 LOCAL NUMBER 002N007E14K01S

NORTHWEST OF TWENTYNINE PALMS. UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 10 IN, DEPTH 644 FT. PERFORATED 450-525, 538-548, 550-558 FT. ALTITUDE OF LSD 2540 FT. RECORDS AVAILABLE 1952-67, 1970, 1973, 1975, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 334.00 FEET BELOW LAND SURFACE DATUM JUL 25, 1952.

LOWEST WATER LEVEL 357.68 FEET BELOW LAND SURFACE DATUM APR 26, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 26, 1979	357.68

SITE NUMBER 341918116101501 LOCAL NUMBER 003N008E29C01S

ABOUT 9 MI NORTHWEST OF TWENTYNINE PALMS MARINE CORPS BASE HEADQUARTERS. DRILLED TEST WATER-TABLE WELL IN ALLUVIUM. DIAM 10 IN. DEPTH 201.3 FT. ALTITUDE OF LSD 1890.93 FT. RECORDS AVAILABLE 1952-67, 1970, 1973, 1975, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 86.61 FEET BELOW LAND SURFACE DATUM JAN 09, 1980.

LOWEST WATER LEVEL 89.17 FEET BELOW LAND SURFACE DATUM NOV 14, 1961.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 19, 1978	88.64	MAR 19, 1979	88.57	MAY 30, 1979	88.61	AUG 22, 1979	88.58
JAN 17, 1979	88.61	APR 04	88.57	JUN 12	88.67	SEP 19	88.61
FEB 08	88.59	26	88.61	27	88.67		
MAR 07	88.57	MAY 03	88.57	JUL 25	88.62		

SITE NUMBER 342517116380601 LOCAL NUMBER 004N003E23G01S

ABOUT 4.5 MI NORTH OF HWY 247. DRILLED UNUSED WATER-TABLE WELL. DIAM 10 IN. DEPTH 107 FT. PERFORATED 76-107 FT. ALTITUDE OF LSD 2850 FT. RECORDS AVAILABLE 1950, 1975, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 71.80 FEET BELOW LAND SURFACE DATUM OCT 14, 1950.

LOWEST WATER LEVEL 75.50 FEET BELOW LAND SURFACE DATUM APR 25, 1975.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 12, 1979	73.39

SITE NUMBER 342448116371501 LOCAL NUMBER 004N003E24Q01S

ABOUT 3 MI NORTH OF HWY 247, NORTHEAST OF OLD WOMAN SPRINGS. DRILLED WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN. DEPTH 240.8 FT. ALTITUDE OF LSD 2833 FT. RECORDS AVAILABLE 1954-67, 1969-71, 1975, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 56.60 FEET BELOW LAND SURFACE DATUM MAY 06, 1954.

LOWEST WATER LEVEL 58.43 FEET BELOW LAND SURFACE DATUM APR 07, 1970.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 19, 1979	56.10

SITE NUMBER 342513115220001 LOCAL NUMBER 004N015E24E01S

ABOUT 16.2 MI NORTHWEST OF MILLIGAN. DRILLED UNUSED WATER-TABLE WELL. DIAM UNKNOWN. DEPTH 267.9 FT. ALTITUDE OF LSD 848 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 258.30 FEET BELOW LAND SURFACE DATUM JUL 20, 1979.

LOWEST WATER LEVEL 258.30 FEET BELOW LAND SURFACE DATUM JUL 20, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 20, 1979	258.30

SITE NUMBER 342641114284301 LOCAL NUMBER 004N024E17H01S

ABOUT 3.2 MI SOUTHEAST OF LAKE HAVASU ROAD, IN CHEMEHUEVI WASH. DUG WATER-TABLE WELL IN ALLUVIUM. DIAM 36 IN. DEPTH 9 FT. ALTITUDE OF LSD 770 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 6.09 FEET BELOW LAND SURFACE DATUM AUG 03, 1978.

LOWEST WATER LEVEL 6.36 FEET BELOW LAND SURFACE DATUM APR 24, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 24, 1979	6.36

SITE NUMBER 343153116542301 LOCAL NUMBER 005N001E17D01S

ABOUT 6.5 MI NORTH OF LUCERNE VALLEY. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 14 IN. DEPTH 164.5 FT. ALTITUDE OF LSD 2880 FT. RECORDS AVAILABLE 1954-55, 1960-71, 1976, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 62.27 FEET BELOW LAND SURFACE DATUM APR 22, 1954.

LOWEST WATER LEVEL 130.83 FEET BELOW LAND SURFACE DATUM APR 13, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 13, 1979	130.83

SAN BERNARDINO COUNTY--Continued

SITE NUMBER 343106115295901 LOCAL NUMBER 005N014E15K01S

ABOUT 0.5 MI EAST OF CADIZ. DRILLED UNUSED WATER-TABLE WELL. DIAM 16 TO 12 TO 10 IN. DEPTH 348.6 FT. 12-IN CSG 0-300 FT. 10-IN CSG 0-400 FT. ALTITUDE OF LSD 820 FT. RECORDS AVAILABLE 1910, 1929, 1954, 1964, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 208. FEET BELOW LAND SURFACE DATUM JAN 22, 1929.

LOWEST WATER LEVEL 220. FEET BELOW LAND SURFACE DATUM AUG 24, 1910.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 13, 1979	214.53

SITE NUMBER 343334115443301 LOCAL NUMBER 006N012E32R01S

IN AMBOY. DRILLED UNUSED WATER-TABLE WELL. DIAM 38 IN. DEPTH 82.1 FT. CASED TO 55 FT. ALTITUDE OF LSD 658 FT. RECORDS AVAILABLE 1957, 1964, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 41.85 FEET BELOW LAND SURFACE DATUM AUG 12, 1964.

LOWEST WATER LEVEL 52. FEET BELOW LAND SURFACE DATUM JUL 01, 1957.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 27, 1979	43.47

SITE NUMBER 343407115421201 LOCAL NUMBER 006N012E35F01S

ABOUT 2 MI NORTH-NORTHWEST OF SALTUS. DRILLED UNUSED WATER-TABLE WELL. DIAM 16 IN. DEPTH 284 FT. ALTITUDE OF LSD 767 FT. RECORDS AVAILABLE 1955, 1957, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 190. FEET BELOW LAND SURFACE DATUM SEP 30, 1955.

LOWEST WATER LEVEL 203.61 FEET BELOW LAND SURFACE DATUM JUL 21, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 21, 1979	203.61

SITE NUMBER 344352115145601 LOCAL NUMBER 008N016E36R01S

ABOUT 11 MI NORTHEAST OF DANBY. DRILLED DOMESTIC WATER-TABLE WELL. DIAM UNKNOWN. DEPTH 800 FT. ALTITUDE OF LSD 1717 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 337.38 FEET BELOW LAND SURFACE DATUM JUL 21, 1979.

LOWEST WATER LEVEL 337.38 FEET BELOW LAND SURFACE DATUM JUL 21, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 21, 1979	337.38

SITE NUMBER 344931115103601 LOCAL NUMBER 008N017E02D01S

IN FENNER. DRILLED UNUSED WATER-TABLE WELL. DIAM 15.5 TO 12.5 IN, DEPTH 1090 FT, 15.5-IN CSG 0-121 FT, 12.5-IN CSG 0-582 FT. ALTITUDE OF LSD 2086 FT. RECORDS AVAILABLE 1925, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 368.8 FEET BELOW LAND SURFACE DATUM JUL 12, 1979.

LOWEST WATER LEVEL 452. FEET BELOW LAND SURFACE DATUM DEC 14, 1925.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 12, 1979	368.8

SITE NUMBER 345110116473601 LOCAL NUMBER 009N002E20Q01S

AT DAGGETT AIRPORT. UNUSED WATER TABLE WELL. DIAM 8 IN, DEPTH 90 FT. ALTITUDE OF LSD 1921.4 FT. RECORDS IN 1932, 1941-48, 1952-57, 1959 FURNISHED BY U.S. BUREAU OF RECLAMATION AND SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT. RECORDS AVAILABLE 1932, 1941-48, 1952-71, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 41.81 FEET BELOW LAND SURFACE DATUM NOV 15, 1945.

LOWEST WATER LEVEL 85.51 FEET BELOW LAND SURFACE DATUM JUN 29, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 10, 1979	84.13

SITE NUMBER 345706116393501 LOCAL NUMBER 010N003E21A01S

AT HARVARD RAILROAD STATION. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 10 IN, DEPTH 139.7 FT. ALTITUDE OF LSD 1817 FT. RECORDS AVAILABLE 1919, 1922, 1930, 1933-35, 1938-40, 1950, 1952-71, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 80.48 FEET BELOW LAND SURFACE DATUM DEC 15, 1922.

LOWEST WATER LEVEL 124.65 FEET BELOW LAND SURFACE DATUM JUN 29, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 18, 1979	123.46

SITE NUMBER 345629114472601 LOCAL NUMBER 010N021E21Q02S

NORTHEAST OF IBIS. UNUSED WATER-TABLE WELL. DIAM 16 IN, DEPTH 920 FT. PERFORATED 130-635 FT. ALTITUDE OF LSD 1460 FT. RECORDS AVAILABLE 1917, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 118.81 FEET BELOW LAND SURFACE DATUM APR 18, 1979.

LOWEST WATER LEVEL 130.00 FEET BELOW LAND SURFACE DATUM OCT 25, 1917.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 18, 1979	118.81

SITE NUMBER 350547116481301 LOCAL NUMBER 012N002E31A01S

ON FORT IRWIN, WEST OF COYOTE LAKE. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 14 IN, DEPTH 114.22 FT. ALTITUDE OF LSD 1789.5 FT. RECORDS AVAILABLE 1955-68, 1970, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 52.12 FEET BELOW LAND SURFACE DATUM APR 10, 1979.

LOWEST WATER LEVEL 57.06 FEET BELOW LAND SURFACE DATUM JUL 12, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 10, 1979	52.12

SITE NUMBER 350627116152401 LOCAL NUMBER 012N007E29A01S

ABOUT 15.5 MI WEST-SOUTHWEST OF BAKER. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN. DEPTH 46.3 FT. ALTITUDE OF LSD 1100 FT. RECORDS AVAILABLE 1919, 1954, 1965, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 31.1 FEET BELOW LAND SURFACE DATUM DEC 05, 1919.

LOWEST WATER LEVEL 39.88 FEET BELOW LAND SURFACE DATUM AUG 08, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
AUG 08, 1979	39.88

SITE NUMBER 351148116022101 LOCAL NUMBER 013N008E20J01S

ABOUT 5 MI SOUTHEAST OF BAKER. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM OF PLEISTOCENE AGE. DIAM 16 IN. DEPTH 400 FT. ALTITUDE OF LSD 980 FT. RECORDS AVAILABLE 1954-56, 1958-66, 1970, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 64.69 FEET BELOW LAND SURFACE DATUM JUN 30, 1978.

LOWEST WATER LEVEL 66.57 FEET BELOW LAND SURFACE DATUM MAR 14, 1962.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 16, 1979	65.62

SITE NUMBER 351208115120301 LOCAL NUMBER 013N017E18N01S

ABOUT 15.5 MI SOUTH-SOUTHEAST OF IVANPAH. STOCK AND DOMESTIC WATER-TABLE WELL. DIAM 12 IN. DEPTH 879 FT. ALTITUDE OF LSD 4349 FT. RECORDS AVAILABLE 1912, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 341.60 FEET BELOW LAND SURFACE DATUM APR 17, 1979.

LOWEST WATER LEVEL 375.00 FEET BELOW LAND SURFACE DATUM JAN 01, 1912.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 17, 1979	341.60

SAN BERNARDINO COUNTY--Continued

SITE NUMBER 351630116364501 LOCAL NUMBER 014N003E13K01S

ABOUT 5 MI NORTHEAST OF CAMP IRWIN. DRILLED INSTITUTION WATER-TABLE WELL. DIAM 14 TO 10 IN. DEPTH 600 FT. 14-IN CSG 0-430 FT. 10-IN CSG 420-600 FT. PERFORATED 180-410, 430-580 FT. ALTITUDE OF LSD 2393.8 FT. RECORDS AVAILABLE 1965, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 173.00 FEET BELOW LAND SURFACE DATUM JUN 14, 1965.

LOWEST WATER LEVEL 186.39 FEET BELOW LAND SURFACE DATUM APR 10, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 10, 1979	186.39

SITE NUMBER 351547116405001 LOCAL NUMBER 014N003E32J01S

ON CAMP IRWIN. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 14 TO 12 IN. DEPTH 550 FT. 14-IN CSG 0-34 FT. 12-IN CSG 314-550 FT. PERFORATED 200-310, 340-536 FT. ALTITUDE OF LSD 2466.41 FT. RECORDS AVAILABLE 1945, 1955, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 173.00 FEET BELOW LAND SURFACE DATUM JUN 01, 1945.

LOWEST WATER LEVEL 186.04 FEET BELOW LAND SURFACE DATUM JUL 13, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 10, 1979	185.27

SITE NUMBER 351610116035401 LOCAL NUMBER 014N009E30K01S

ABOUT 1 MI NORTHEAST OF BAKER. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 6 IN. DEPTH 95.3 FT. ALTITUDE OF LSD 965 FT. RECORDS AVAILABLE 1954-68, 1970, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 75.32 FEET BELOW LAND SURFACE DATUM MAR 03, 1955.

LOWEST WATER LEVEL 76.93 FEET BELOW LAND SURFACE DATUM OCT 31, 1956.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 16, 1979	76.18

SITE NUMBER 352306116540901 LOCAL NUMBER 015N001E20F01S

ABOUT 7.9 MI NORTH OF GOLDSTONE. DRILLED UNUSED WATER-TABLE WELL. DIAM 4 IN. DEPTH 181 FT. ALTITUDE OF LSD 3030 FT. RECORDS AVAILABLE 1969. 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 134.28 FEET BELOW LAND SURFACE DATUM JUL 12. 1978.

LOWEST WATER LEVEL 137.02 FEET BELOW LAND SURFACE DATUM AUG 20. 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 10. 1979	135.23

SITE NUMBER 352306115193901 LOCAL NUMBER 015N015E13G02S

ABOUT 4.3 MI NORTH-NORTHWEST OF IVANPAH. DRILLED INDUSTRIAL WATER-TABLE WELL. DIAM 18 IN. DEPTH 822 FT IN 1923. 735 FT IN 1970. ALTITUDE OF LSD 2927 FT. RECORDS AVAILABLE 1923. 1940. 1970. 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 367.00 FEET BELOW LAND SURFACE DATUM MAY 15. 1923.

LOWEST WATER LEVEL 392.00 FEET BELOW LAND SURFACE DATUM JAN 01. 1940.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 17. 1979	372.66

SITE NUMBER 352713115204401 LOCAL NUMBER 015N015E59N01S

ABOUT 4.5 MI WEST OF NIPTON. DRILLED UNUSED WATER-TABLE WELL. DIAM 18 IN. DEPTH 125 FT WITH 12 FT TUNNEL AT BOTTOM IN 1893. 110.5 FT IN 1969. ALTITUDE OF LSD 2630 FT. RECORDS AVAILABLE 1916-17. 1953-56. 1958-60. 1965. 1969. 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 90.00 FEET BELOW LAND SURFACE DATUM JAN 15. 1965.

LOWEST WATER LEVEL 105.00 FEET BELOW LAND SURFACE DATUM SEP 14. 1954.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 17. 1979	99.32

SITE NUMBER 352722115583701 LOCAL NUMBER 016N009E24N01S

ABOUT 10 MI NORTHEAST OF SILVER LAKE. UNUSED WATER-TABLE WELL. DIAM 60 IN. DEPTH 31.0 FT. ALTITUDE OF LSD 3000 FT. RECORDS AVAILABLE 1965, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 11.18 FEET BELOW LAND SURFACE DATUM JUN 24, 1965.

LOWEST WATER LEVEL 13.97 FEET BELOW LAND SURFACE DATUM JUL 28, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 17, 1979	11.31

SITE NUMBER 352626115402301 LOCAL NUMBER 016N012E26N01S

ABOUT 7.3 MI NORTHEAST OF PASO ALTO. DRILLED STOCK WATER-TABLE WELL. DIAM 48 IN. DEPTH 64.7 FT. ALTITUDE OF LSD 3725 FT. RECORDS AVAILABLE 1969, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 44.63 FEET BELOW LAND SURFACE DATUM JUN 20, 1980.

LOWEST WATER LEVEL 64.00 FEET BELOW LAND SURFACE DATUM DEC 04, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 17, 1979	44.96

SITE NUMBER 353157115454801 LOCAL NUMBER 017N011E25M01S

IN SHADOW VALLEY, NORTHWEST OF VALLEY WELLS STATION. DIAM 10 IN. DEPTH 376 FT. ALTITUDE OF LSD 3320 FT. RECORDS AVAILABLE 1933, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 358.58 FEET BELOW LAND SURFACE DATUM APR 17, 1979.

LOWEST WATER LEVEL 388.00 FEET BELOW LAND SURFACE DATUM JUN 22, 1933.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 17, 1979	358.58

SITE NUMBER 354122116175601 LOCAL NUMBER 019N006E36N01S

ABOUT 22 MI SOUTH-SOUTHEAST OF SHOSHONE. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 6 IN. DEPTH 295 FT. ALTITUDE OF LSD 480 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 205.30 FEET BELOW LAND SURFACE DATUM JUL 28, 1978.

LOWEST WATER LEVEL 210.70 FEET BELOW LAND SURFACE DATUM APR 17, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 17, 1979	210.70

SITE NUMBER 354642115383601 LOCAL NUMBER 019N012E13D01S

ABOUT 3 MI SOUTHWEST OF SANDY. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN. DEPTH 500 FT. ALTITUDE OF LSD 2580 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 37.06 FEET BELOW LAND SURFACE DATUM JUL 10, 1979.

LOWEST WATER LEVEL 37.68 FEET BELOW LAND SURFACE DATUM JUN 20, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 10, 1979	37.06

SITE NUMBER 340743117162001 LOCAL NUMBER 001N004W35L01S

ABOUT 0.14 MI SOUTHWEST OF INTERSECTION OF 16TH STREET AND CRESTVIEW IN SAN BERNARDINO. DRILLED UNUSED WATER-TABLE WELL. DIAM 3 IN. DEPTH 235.5 FT. ALTITUDE OF LSD 1130 FT. MEASUREMENTS FURNISHED BY CALIFORNIA DEPARTMENT OF WATER RESOURCES 1904-70; MEASUREMENTS BY U.S. GEOLOGICAL SURVEY 1971 TO CURRENT YEAR. RECORDS AVAILABLE 1904-70, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 7.22 FEET ABOVE LAND SURFACE DATUM MAR 02, 1917.

LOWEST WATER LEVEL WELL DRY SEP 06, 1929; DEC 05, 1929; JAN 03, 1930.

WATER LEVELS IN FEET ABOVE OR BELOW(-) LAND SURFACE DATUM.

DATE	WATER LEVEL
JUN 28, 1979	138.52

SITE NUMBER 342641116571101 LOCAL NUMBER 004N001W11Q01S

IN LUCERNE VALLEY (VILLAGE). DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM. DIAM 6 IN. DEPTH 85 FT. ALTITUDE OF LSD 2933.3 FT. RECORDS AVAILABLE 1950, 1952-71, 1976, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 50.47 FEET BELOW LAND SURFACE DATUM MAY 15, 1952.

LOWEST WATER LEVEL 78.50 FEET BELOW LAND SURFACE DATUM APR 13, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 13, 1979	78.50

SITE NUMBER 343122117044501 LOCAL NUMBER 005N003W14G01S

ABOUT 1.5 MI NORTHEAST OF APPLE VALLEY. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 8 IN. DEPTH 226.3 FT. ALTITUDE OF LSD 2916 FT. RECORDS AVAILABLE 1957, 1964-71, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 81.64 FEET BELOW LAND SURFACE DATUM APR 25, 1957.

LOWEST WATER LEVEL 101.69 FEET BELOW LAND SURFACE DATUM APR 13, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 13, 1979	101.69

SITE NUMBER 343900117261801 LOCAL NUMBER 006N005W19J02S

ABOUT 1.5 MI NORTHWEST OF ADELANTO. DRILLED UNUSED WATER-TABLE WELL. DIAM 9 IN. DEPTH 1200 FT. ALTITUDE OF LSD 2838 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 78.3 FEET BELOW LAND SURFACE DATUM APR 17, 1979.

LOWEST WATER LEVEL 78.3 FEET BELOW LAND SURFACE DATUM APR 17, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 17, 1979	78.3

SAN BERNARDINO COUNTY--Continued

SITE NUMBER 344728117145601 LOCAL NUMBER 008N004W12Q01S

ABOUT 16 MI SOUTHWEST OF BARSTOW. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM. DIAM 8 IN. DEPTH 49.1 FT. ALTITUDE OF LSD 2329 FT. RECORDS AVAILABLE 1931-32, 1935-37, 1939-41, 1943-64, 1966-76, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 7.16 FEET BELOW LAND SURFACE DATUM MAY 13, 1954.

LOWEST WATER LEVEL 33.50 FEET BELOW LAND SURFACE DATUM OCT 31, 1963.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 27, 1979	8.14

SITE NUMBER 345243116563802 LOCAL NUMBER 009N001W11R02S

NEAR BARSTOW. DRILLED UNUSED WATER-TABLE WELL. DIAM 2 IN. DEPTH 102 FT. SAND POINT 100-102 FT. ALTITUDE OF LSD 2032.51 FT. RECORDS AVAILABLE 1972-73, 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 19.30 FEET BELOW LAND SURFACE DATUM JUN 03, 1980.

LOWEST WATER LEVEL 31.80 FEET BELOW LAND SURFACE DATUM NOV 03, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25, 1978	21.80	MAY 22, 1979	20.50

WATER QUALITY DATA

LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
009N001-11R02S	78-10-25	1045	1020	7.1	19.5	390	150	120	22	100
	79-05-22	1430	990	7.0	24.0	370	110	110	22	96

DATE OF SAMPLE	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)
78-10-25	36	2.2	3.8	190	140	120	.4	22	706	.19	.00	.00
79-05-22	36	2.2	3.9	260	130	130	.5	22	674	.23	.00	.00

DATE OF SAMPLE	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
78-10-25	350	2700
79-05-22	350	2000

SITE NUMBER 345153117080701 LOCAL NUMBER 009N003W13R01S

ABOUT 2 MI SOUTHWEST OF LENWOOD. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN. DEPTH 212 FT. ALTITUDE OF LSD 2245 FT. RECORDS AVAILABLE 1954, 1963-71, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 60.60 FEET BELOW LAND SURFACE DATUM APR 20, 1954.

LOWEST WATER LEVEL 89.14 FEET BELOW LAND SURFACE DATUM NOV 14, 1968.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
AUG 08, 1979	83.10

SITE NUMBER 350039117185301 LOCAL NUMBER 011N004W29R01S

ABOUT 2.9 MI EAST OF LOCKHART. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN, DEPTH 500 FT IN 1952, 303 FT IN 1968, 361.2 FT IN 1978. ALTITUDE OF LSD 2045 FT. RECORDS AVAILABLE 1953-71, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 83.42 FEET BELOW LAND SURFACE DATUM NOV 17, 1960.

LOWEST WATER LEVEL 171.15 FEET BELOW LAND SURFACE DATUM JUL 14, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 10, 1979	157.30

SITE NUMBER 350235117321501 LOCAL NUMBER 011N006W17P02S

ABOUT 6 MI NORTHEAST OF BORON. DRILLED UNUSED WATER-TABLE WELL. DIAM 10 IN, DEPTH 647 FT. ALTITUDE OF LSD 2550 FT. RECORDS AVAILABLE 1953, 1968, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 262.00 FEET BELOW LAND SURFACE DATUM JUL 13, 1953.

LOWEST WATER LEVEL 265.52 FEET BELOW LAND SURFACE DATUM AUG 09, 1968.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
AUG 08, 1979	264.33

SAN BERNARDINO COUNTY--Continued

SITE NUMBER 340416117205101 LOCAL NUMBER 001S004W19E01S

EAST OF MERIDIAN AVENUE, NORTH OF VALLEY BLVD. DRILLED OBSERVATION WELL IN ALLUVIUM. DIAM 2 IN. DEPTH 222 FT. CASED TO 251 FT. PERFORATED 223-244 FT. ALTITUDE OF LSD 1038.9 FT. RECORDS AVAILABLE 1964, 1967-70, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 163.57 FEET BELOW LAND SURFACE DATUM JUN 13, 1980.

LOWEST WATER LEVEL 193.94 FEET BELOW LAND SURFACE DATUM JAN 02, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 06, 1979	167.49	SEP 14, 1979	167.49

SAN DIEGO COUNTY

SITE NUMBER 331800116210001 LOCAL NUMBER 010S006E21A01S

ABOUT 0.1 MI SOUTHWEST OF INTERSECTION OF BORREGO VALLEY AND HENDERSON CANYON ROADS. UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN. DEPTH 310 FT. ALTITUDE OF LSD 640 FT. RECORDS AVAILABLE 1965, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 170.83 FEET BELOW LAND SURFACE DATUM DEC 26, 1978.

LOWEST WATER LEVEL 185.48 FEET BELOW LAND SURFACE DATUM JUL 22, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 26, 1978	170.83

SAN DIEGO COUNTY--Continued

SITE NUMBER 331432116194602 LOCAL NUMBER 011S006E11D02S

ABOUT 1 MI SOUTHEAST OF INTERSECTION OF BORREGO VALLEY ROAD AND PALM CANYON DRIVE. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM. DIAM 14 IN, DEPTH 218 FT. ALTITUDE OF LSD 500 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 40.30 FEET BELOW LAND SURFACE DATUM DEC 27, 1978.

LOWEST WATER LEVEL 40.30 FEET BELOW LAND SURFACE DATUM DEC 27, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 27, 1978	40.30

SITE NUMBER 330639116074701 LOCAL NUMBER 012S008E22E01S

ABOUT 2.5 MI SOUTHEAST OF INTERSECTION OF HWY 78 AND SPLIT MTN ROAD. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM. DIAM 16 IN, DEPTH 226 FT. ALTITUDE OF LSD 110 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 108.98 FEET BELOW LAND SURFACE DATUM DEC 27, 1978.

LOWEST WATER LEVEL 108.98 FEET BELOW LAND SURFACE DATUM DEC 27, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 27, 1978	108.98

SITE NUMBER 325848116260301 LOCAL NUMBER 014S005E02J03S

ABOUT 0.2 MI NORTH OF AGUA CALIENTE. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 10 IN, DEPTH 181 FT. ALTITUDE OF LSD 2030 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 74.10 FEET BELOW LAND SURFACE DATUM DEC 27, 1978.

LOWEST WATER LEVEL 74.10 FEET BELOW LAND SURFACE DATUM DEC 27, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 27, 1978	74.10

SAN DIEGO COUNTY--Continued

SITE NUMBER 325808116232801 LOCAL NUMBER 014S006E08F03S

ABOUT 1 MI NORTHEAST OF TROUTMAN MTN. UNUSED WATER-TABLE WELL. DIAM 8 IN. DEPTH UNKNOWN. ALTITUDE OF LSD 1645 FT. RECORDS AVAILABLE 1962, 1965, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 65.31 FEET BELOW LAND SURFACE DATUM MAR 16, 1962.

LOWEST WATER LEVEL 78.15 FEET BELOW LAND SURFACE DATUM DEC 27, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 27, 1978	78.15

SITE NUMBER 325159116551101 LOCAL NUMBER 015S001E18L03S

ABOUT 0.3 MI NORTHEAST OF INTERSECTION OF MAPLEVIEW STREET AND HWY 67, NORTH OF LAKESIDE. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM UNKNOWN. DEPTH UNKNOWN. ALTITUDE OF LSD 395 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 19.49 FEET BELOW LAND SURFACE DATUM DEC 19, 1979.

LOWEST WATER LEVEL 20.48 FEET BELOW LAND SURFACE DATUM DEC 06, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 06, 1978	20.48

SITE NUMBER 325215116110701 LOCAL NUMBER 015S008E17D02S

WEST OF BOW WILLOW RANGER STATION. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 6 IN. DEPTH 87 FT. ALTITUDE OF LSD 610 FT. RECORDS AVAILABLE 1966, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 63.60 FEET BELOW LAND SURFACE DATUM MAY 04, 1966.

LOWEST WATER LEVEL 71.40 FEET BELOW LAND SURFACE DATUM FEB 01, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 27, 1978	71.36	FEB 01, 1979	71.40

SAN DIEGO COUNTY--Continued

SITE NUMBER 332402117345701 LOCAL NUMBER 009S007W11L01S

ON CAMP PENDLETON MARINE CORPS BASE, SOUTHEAST OF SAN CLEMENTE. DRILLED UNUSED WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE. DIAM 20 TO 12 IN, DEPTH 100 FT IN 1971, 42 FT IN 1972. CASED TO 100 FT. PERFORATED 5-100 FT. ALTITUDE OF LSD 36.95 FT. RECORDS AVAILABLE 1966 TO CURRENT YEAR.

HIGHEST WATER LEVEL 3.74 FEET BELOW LAND SURFACE DATUM MAR 13, 1979.

LOWEST WATER LEVEL 18.05 FEET BELOW LAND SURFACE DATUM JAN 03, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 1978	10.50	DEC 04, 1978	10.18	JAN 29, 1979	7.36	MAR 26, 1979	6.43
10	10.44	12	10.08	FEB 07	6.53	APR 02	6.09
16	10.41	22	9.92	12	6.81	10	6.39
23	11.42	27	9.83	20	6.90	16	6.56
30	10.39	JAN 03, 1979	9.82	26	6.69	23	6.63
NOV 06	10.37	12	7.52	MAR 05	6.60	30	6.69
13	10.39	15	7.53	13	3.74	MAY 07	6.93
20	10.28	23	7.38	19	6.54	14	7.03

SITE NUMBER 332303117332801 LOCAL NUMBER 009S007W13R01S

ABOUT 0.6 MI SOUTH OF BASILONE ROAD NEAR SAN ONOFRE CREEK. DRILLED UNUSED WATER-TABLE WELL. DIAM 24 IN, DEPTH 225.7 FT. PERFORATED 94-164, 215-225 FT. ALTITUDE OF LSD 51.26 FT. RECORDS AVAILABLE 1956 TO CURRENT YEAR.

HIGHEST WATER LEVEL 0.09 FEET BELOW LAND SURFACE DATUM FEB 26, 1973.

LOWEST WATER LEVEL 37.53 FEET BELOW LAND SURFACE DATUM FEB 28, 1962.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 1978	17.72	DEC 05, 1978	19.26	FEB 07, 1979	10.66	APR 02, 1979	9.20
10	18.11	12	19.32	12	10.70	10	9.39
13	19.08	22	18.57	20	10.62	16	9.56
16	18.25	27	18.45	26	9.74	23	9.59
23	18.49	JAN 03, 1979	18.66	MAR 05	10.05	30	9.64
30	18.65	12	13.87	13	10.09	MAY 07	9.77
NOV 06	18.86	15	13.56	19	10.71	14	9.95
20	19.14	29	12.40	26	9.66		

SITE NUMBER 331026116585201 LOCAL NUMBER 010S001W16H01S

NORTH OF PAUMA VALLEY. DRILLED IRRIGATION WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE. DIAM UNKNOWN TO 245 FT, 10 IN 245-365 FT, 8 IN 364-419 FT, DEPTH 419 FT, PERFORATED 270-360, 364-419 FT. ALTITUDE OF LSD 885 FT. RECORDS AVAILABLE 1961, 1967, 1971-73, 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 117.39 FEET BELOW LAND SURFACE DATUM MAR 31, 1980.

LOWEST WATER LEVEL 223.50 FEET BELOW LAND SURFACE DATUM MAR 21, 1967.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11, 1978	163.32	FEB 05, 1979	132.75	MAY 08, 1979	132.76 H	AUG 14, 1979	144.51
NOV 16	163.14	MAR 22	125.54	JUN 14	136.25	SEP 12	149.69
JAN 04, 1979	141.22	APR 10	123.08	JUL 25	139.80		

WATER QUALITY DATA

LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT
010S001W16H01S	79-06-14	1110	750	7.1	30.5	260	62	25	52	30

DATE OF SAMPLE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
79-06-14	1.4	3.7	170	84	79	.2	45	518	0	40

SITE NUMBER 331544117222101 LOCAL NUMBER 010S005W35K05S

ABOUT 0.5 MI NORTHWEST OF VANDEGRIFT BLVD AND EL CAMINO REAL. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 6 IN, DEPTH 150.4 FT, PERFORATED 99-119, 129-149 FT. ALTITUDE OF LSD 26.57 FT. RECORDS AVAILABLE 1951 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.19 FEET BELOW LAND SURFACE DATUM JAN 18, 1979.

LOWEST WATER LEVEL 25.61 FEET BELOW LAND SURFACE DATUM AUG 17, 1951.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 1978	9.16	NOV 16, 1978	8.42	JAN 11, 1979	1.27	APR 17, 1979	1.74
10	9.46	21	8.28	18	1.19	24	1.87
17	8.70	DEC 05	7.86	FEB 09	1.23	MAY 09	2.17
24	8.55	12	7.60	MAR 02	1.73	15	2.65
NOV 02	8.69	21	5.50	07	1.40	25	2.70
09	8.66	28	4.50	15	1.65	31	2.83

SITE NUMBER 330008117114101 LOCAL NUMBER 013S003W33G02S

ABOUT 0.36 MI FROM INTERSECTION OF VIA DE SANTA FE AND CALZADA DEL BASQUE. DIAM 12 IN. DEPTH UNKNOWN. ALTITUDE OF LSD 45 FT.

WATER QUALITY DATA

LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
013S003W33G02S	78-12-06	1045	2220	7.5	17.5	750	640	170	78	240

DATE OF SAMPLE	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)
78-12-06	40	3.7	6.7	110	300	330	.2	24	1390	2.0	.02	.06

DATE OF SAMPLE	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
78-12-06	150	2800

SITE NUMBER 325852117134801 LOCAL NUMBER 014S003W06P04S

ABOUT 0.13 MI SOUTHWEST OF INTERSECTION OF VIA DE LA VALLE AND EL CAMINO REAL NEAR DEL MAR. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 14 IN. DEPTH 36.6 FT. ALTITUDE OF LSD 18 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.51 FEET BELOW LAND SURFACE DATUM JUL 14, 1980.

LOWEST WATER LEVEL 5.08 FEET BELOW LAND SURFACE DATUM DEC 06, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 06, 1978	5.08

SITE NUMBER 325131116560501 LOCAL NUMBER 015S001W24H04S

ABOUT 0.14 MI WEST OF WINTER GARDENS BLVD. DIAM UNKNOWN. DEPTH UNKNOWN. ALTITUDE OF LSD 382 FT.

WATER QUALITY DATA

LOCAL IDENT- I- FIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
015S001W24H04S	78-12-08	1130	2100	6.9	10.5	730	520	160	80	200

DATE OF SAMPLE	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
78-12-08	37	3.2	5.6	210	250	430	.3	36	1290	0.6	.09	.28

DATE OF SAMPLE	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
78-12-08	120	30

SITE NUMBER 324630117082601 LOCAL NUMBER 016S003W13Q03S

ABOUT 0.20 MI SOUTH OF INTERSECTION OF FRIARS ROAD AND STADIUM WAY. DIAM UNKNOWN. DEPTH UNKNOWN. ALTITUDE OF LSD 45 FT.

WATER QUALITY DATA

LOCAL IDENT- I- FIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
016S003W13Q03S	78-12-08	0945	2130	8.2	5.0	340	210	55	50	310

DATE OF SAMPLE	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
78-12-08	66	7.3	6.2	130	150	500	.3	2.3	1152	.07	.12	.37

DATE OF SAMPLE	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
78-12-08	230	50

SAN DIEGO COUNTY--Continued

SITE NUMBER 324630117082701 LOCAL NUMBER 016S003W13Q04S

ABOUT 0.3 MI SOUTHWEST OF INTERSECTION OF FRIARS ROAD AND STADIUM WAY, NORTH OF UNIVERSITY HEIGHTS. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN, DEPTH 52.45 FT. ALTITUDE OF LSD 45 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 12.57 FEET BELOW LAND SURFACE DATUM DEC 08, 1978.

LOWEST WATER LEVEL 12.57 FEET BELOW LAND SURFACE DATUM DEC 08, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 08, 1978	12.57

SITE NUMBER 324005117012001 LOCAL NUMBER 017S001W30B01S

ABOUT 0.25 MI FROM SOUTHEAST CORNER OF BONITA AND CENTRAL AVENUES IN SUNNYSIDE. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN, DEPTH UNKNOWN. ALTITUDE OF LSD 85 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 9.40 FEET BELOW LAND SURFACE DATUM DEC 07, 1978.

LOWEST WATER LEVEL 9.96 FEET BELOW LAND SURFACE DATUM DEC 19, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 07, 1978	9.40

SITE NUMBER 323530117050701 LOCAL NUMBER 018S002W21H03S

ABOUT 0.25 MI SOUTH OF MAIN STREET NEAR INTERSTATE 5, EAST OF IMPERIAL BEACH. DRILLED IRRIGATION WATER-TABLE WELL IN ALLUVIUM. DIAM 13 IN, DEPTH UNKNOWN. ALTITUDE OF LSD 12 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 10.30 FEET BELOW LAND SURFACE DATUM DEC 19, 1979.

LOWEST WATER LEVEL 11.03 FEET BELOW LAND SURFACE DATUM DEC 07, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 07, 1978	11.03

SITE NUMBER 323257117050401 LOCAL NUMBER 019S002W04H07S

ABOUT 0.07 MI WEST OF HOLLISTER STREET. DRILLED IRRIGATION WATER-TABLE WELL. DIAM 20 IN. DEPTH UNKNOWN. ALTITUDE OF LSD 27 FT.

WATER QUALITY DATA

LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
019S002W04H07S	78-12-07	0945	3000	7.2	16.5	710	480	170	69	420

DATE OF SAMPLE	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)
78-12-07	56	6.9	5.7	230	520	570	.7	19	1910	.11	.10	.31

DATE OF SAMPLE	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
78-12-07	510	70

SITE NUMBER 323257117051201 LOCAL NUMBER 019S002W04H08S

ABOUT 0.23 MI WEST OF HOLLISTER STREET, SOUTHEAST OF IMPERIAL BEACH. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN. DEPTH UNKNOWN. ALTITUDE OF LSD 26 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 9.72 FEET BELOW LAND SURFACE DATUM DEC 19, 1979.

LOWEST WATER LEVEL 12.87 FEET BELOW LAND SURFACE DATUM DEC 07, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 07, 1978	12.87

SAN LUIS OBISPO COUNTY

SITE NUMBER 345604119340001 LOCAL NUMBER 010N025W20H01S

ABOUT 1.4 MI EAST OF CUYAMA NEAR HWY 166. DRILLED IRRIGATION WATER-TABLE WELL. DIAM 10 IN. DEPTH 656 FT IN 1946. PERFORATED 108-656 FT. ALTITUDE OF LSD 2335 FT. RECORDS AVAILABLE 1946-47, 1956, 1961, 1966, 1968, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 59.00 FEET BELOW LAND SURFACE DATUM JUL 08, 1946.

LOWEST WATER LEVEL 336.49 FEET BELOW LAND SURFACE DATUM APR 26, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 26, 1979	336.49

SITE NUMBER 350312120314101 LOCAL NUMBER 011N035W11B01S

ABOUT 5.5 MI SOUTHWEST OF NIPOMO MESA. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 8 IN. DEPTH 360 FT. ALTITUDE OF LSD 385 FT. RECORDS AVAILABLE 1960, 1967-75, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 306.35 FEET BELOW LAND SURFACE DATUM JUN 30, 1960.

LOWEST WATER LEVEL 350.70 FEET BELOW LAND SURFACE DATUM MAR 20, 1972.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 04, 1978	344.20	APR 16, 1979	344.80	MAY 30, 1979	346.60

SANTA BARBARA COUNTY

SITE NUMBER 342427119294601 LOCAL NUMBER 004N025W21R01S

NORTHEAST OF CARPINTERIA. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN. DEPTH 468 FT. CASED TO 434 FT. PERFORATED 82-98, 120-150, 170-176, 239-240, 289-304, 314-318, 340-341, 356-386, 412-416 FT. ALTITUDE OF LSD 127 FT. MEASUREMENTS BEGINNING 2/15/78 COLLECTED BY U.S. GEOLOGICAL SURVEY AND CARPINTERIA COUNTY WATER DISTRICT. RECORDS AVAILABLE 1941 TO CURRENT YEAR.

HIGHEST WATER LEVEL 32.08 FEET BELOW LAND SURFACE DATUM JUN 18, 1980.

LOWEST WATER LEVEL 124.08 FEET BELOW LAND SURFACE DATUM NOV 24, 1951.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 16, 1978	53.33	JAN 17, 1979	47.06	APR 17, 1979	42.13	AUG 16, 1979	42.08
NOV 17	51.60	FEB 15	45.56	JUN 15	41.39	SEP 17	42.22
DEC 20	49.13	MAR 15	44.10	JUL 19	41.42		

SITE NUMBER 342506119423001 LOCAL NUMBER 004N027W21B01S

NEAR WILSON SCHOOL IN SANTA BARBARA. UNUSED WATER-TABLE WELL. DIAM 16 IN. DEPTH 454 FT. CASED TO 454 FT. PERFORATED 145-350 FT. ALTITUDE OF LSD 68 FT. MEASUREMENTS BEGINNING 5/11/76 FURNISHED BY CITY OF SANTA BARBARA. RECORDS AVAILABLE 1931, 1948-50, 1956 TO CURRENT YEAR.

HIGHEST WATER LEVEL 37.00 FEET BELOW LAND SURFACE DATUM JAN 23, 1948.

LOWEST WATER LEVEL 122.00 FEET BELOW LAND SURFACE DATUM OCT 21, 1931.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1978	62.00	JAN 08, 1979	62.08	APR 11, 1979	67.35	JUL 17, 1979	72.07
NOV 07	64.67	FEB 07	64.62	MAY 04	68.11	AUG 02	74.08
DEC 07	62.85	MAR 08	65.75	JUN 08	68.30	SEP 11	75.54

SITE NUMBER 342613119470401 LOCAL NUMBER 004N028W11P06S

ABOUT 6 MI EAST OF GOLETA. DRILLED PUBLIC SUPPLY WATER-TABLE WELL IN ALLUVIUM OF PLEISTOCENE AGE. DIAM 12 TO 8 IN. DEPTH 2080 FT. 12-IN CSG 0-498 FT. 8-IN CSG 498-1101 FT. PERFORATED 549-591, 637-741, 841-891, 952-1065 FT. ALTITUDE OF LSD 40 FT. RECORDS AVAILABLE 1973-74, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 94.00 FEET BELOW LAND SURFACE DATUM JAN 15, 1973.

LOWEST WATER LEVEL 115.50 FEET BELOW LAND SURFACE DATUM AUG 04, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
AUG 04, 1979	115.50

SITE NUMBER 343911120264001 LOCAL NUMBER 007N034W34B01S

IN LOMPOC. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 16 IN. DEPTH 195 FT. CASED TO 192 FT. PERFORATED 90-192 FT. ALTITUDE OF LSD 102 FT. RECORDS BEGINNING IN 1972 FURNISHED BY U.S. BUREAU OF RECLAMATION. RECORDS AVAILABLE 1965, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 40.70 FEET BELOW LAND SURFACE DATUM APR 23, 1975.

LOWEST WATER LEVEL 58.70 FEET BELOW LAND SURFACE DATUM JUL 27, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25, 1978	46.70	JAN 23, 1979	43.70	APR 23, 1979	41.70	JUL 23, 1979	43.70
NOV 23	48.70	FEB 22	40.70	MAY 24	41.70	AUG 30	54.70
DEC 27	43.70	MAR 26	41.70	JUN 26	42.70	SEP 26	55.70

SITE NUMBER 343840120304801 LOCAL NUMBER 007N035W36J03S

ABOUT 3 MI WEST OF LOMPOC. DRILLED UNUSED WATER-TABLE WELL. DIAM 16 IN, DEPTH 102 FT. PERFORATED 71-95 FT. ALTITUDE OF LSD 50.76 FT. RECORDS 1930-42 FURNISHED BY CITY OF SANTA BARBARA. RECORDS AVAILABLE 1929-42, 1944, 1952, 1961 TO CURRENT YEAR.

HIGHEST WATER LEVEL 4.60 FEET BELOW LAND SURFACE DATUM APR 16, 1941.

LOWEST WATER LEVEL 81.00 FEET BELOW LAND SURFACE DATUM JUL 18, 1933.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23, 1978	20.20	JAN 22, 1979	18.19	APR 24, 1979	18.76	JUL 25, 1979	27.10
NOV 21	19.38	FEB 21	17.39	MAY 21	20.24	AUG 24	24.89
DEC 18	19.01	MAR 22	17.89	JUN 21	21.99	SEP 26	23.15

SITE NUMBER 344457120174001 LOCAL NUMBER 008N032W30D01S .

NORTH OF HWY 135 AND 0.33 MI WEST OF BELL STREET. DRILLED UNUSED WATER-TABLE WELL IN SAND AND GRAVEL. DIAM 16 IN, DEPTH 899 FT, PERFORATED 265-355, 378-409, 463-523, 667-895 FT. ALTITUDE OF LSD 540 FT. RECORDS AVAILABLE 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 23.10 FEET BELOW LAND SURFACE DATUM APR 30, 1978.

LOWEST WATER LEVEL 49.00 FEET BELOW LAND SURFACE DATUM AUG 28, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1978	37.35	OCT 31, 1978	35.82	NOV 30, 1978	33.05	DEC 31, 1978	31.13
10	37.50	NOV 05	35.46	DEC 05	32.56	FEB 15, 1979	30.50
15	36.91	10	35.17	10	32.25	JUL 25	42.21 R
20	36.54	15	35.05	15	32.47	AUG 24	39.39 T
25	36.51	20	34.22	20	32.16	SEP 25	36.40
30	35.80	25	33.57	25	31.50		

R Recently, pumped.

T Nearby, recently pumped.

SITE NUMBER 344443120164501 LOCAL NUMBER 008N032W30H07S

IN LOS ALAMOS. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 12 IN. DEPTH 310 FT. CASED TO 310 FT. PERFORATED 124-310 FT. ALTITUDE OF LSD 563 FT. RECORDS AVAILABLE 1964-76, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 24.10 FEET BELOW LAND SURFACE DATUM MAR 25, 1966.

LOWEST WATER LEVEL 37.90 FEET BELOW LAND SURFACE DATUM SEP 18, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 07, 1979	40.69 R

WATER QUALITY DATA

LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT
008N032W30H07S	79-05-07	1025	508	6.9	19.5	174	40	18	47	37

DATE OF SAMPLE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
79-05-07	1.6	2.6	99	86	64	.1	440	0	50

SITE NUMBER 345500119343201 LOCAL NUMBER 010N025W29K02S

ABOUT 6.5 MI EAST OF NEW CUYAMA. IRRIGATION WATER-TABLE WELL. DIAM 14 IN. DEPTH 296 FT. CASED TO 296 FT. PERFORATED 120-296 FT. ALTITUDE OF LSD 2357 FT. RECORDS AVAILABLE 1966, 1968, 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 121.20 FEET BELOW LAND SURFACE DATUM DEC 11, 1968.

LOWEST WATER LEVEL 334.30 FEET BELOW LAND SURFACE DATUM AUG 25, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 26, 1979	317.20

R Recently, pumped.

SITE NUMBER 345548120242202 LOCAL NUMBER 010N034W24K01S

EAST OF HWY 101 AND SOUTH OF BATTLES ROAD. DRIVEN UNUSED WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 16 IN, DEPTH 714 FT, PERFORATED 650-657, 692-710 FT. ALTITUDE OF LSD 254 FT. MEASUREMENTS FURNISHED BY SANTA MARIA VALLEY WATER CONSERVATION DISTRICT. RECORDS AVAILABLE 1941, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 75.32 FEET BELOW LAND SURFACE DATUM DEC 30, 1941.

LOWEST WATER LEVEL 215.50 FEET BELOW LAND SURFACE DATUM JUL 01, 1972.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 1978	173.80	JAN 08, 1979	156.90	APR 09, 1979	154.10	JUL 10, 1979	159.00

VENTURA COUNTY

SITE NUMBER 341406118561201 LOCAL NUMBER 002N020W23R01S

ABOUT 0.35 MI EAST OF INTERSECTION OF SANTA ROSA AND GERRY ROADS. DRILLED IRRIGATION WATER-TABLE WELL IN ALLUVIUM. DIAM 14 IN, DEPTH 555 FT. PERFORATED 120-225, 465-550 FT. ALTITUDE OF LSD 234.6 FT. RECORDS AVAILABLE 1956 TO CURRENT YEAR.

HIGHEST WATER LEVEL 25.40 FEET BELOW LAND SURFACE DATUM AUG 09, 1973.

LOWEST WATER LEVEL 204.50 FEET BELOW LAND SURFACE DATUM OCT 31, 1961.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 16, 1978	51.99

SITE NUMBER 341351118593801 LOCAL NUMBER 002N020W28D02S

ABOUT 1 MI NORTHEAST OF INTERSECTION OF SANTA ROSA AND OAK CANYON ROADS. DRILLED UNUSED WATER-TABLE WELL. DIAM 10 IN, DEPTH 450 FT. ALTITUDE OF LSD 170 FT. RECORDS AVAILABLE 1956 TO CURRENT YEAR.

HIGHEST WATER LEVEL 77.51 FEET BELOW LAND SURFACE DATUM MAY 29, 1980.

LOWEST WATER LEVEL 140.90 FEET BELOW LAND SURFACE DATUM JUL 12, 1966.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 1978	86.00	NOV 16, 1978	85.36

SITE NUMBER 341616119023701 LOCAL NUMBER 002N021W11J02S

NEAR LOS ANGELES AVENUE AND PRICE ROAD. DRILLED IRRIGATION WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN. DEPTH 1150 FT. PERFORATED 375-416, 659-699, 832-873, 1017-1150 FT. ALTITUDE OF LSD 387 FT. RECORDS AVAILABLE 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 334.40 FEET BELOW LAND SURFACE DATUM APR 11, 1978.

LOWEST WATER LEVEL 364.62 FEET BELOW LAND SURFACE DATUM NOV 16, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 16, 1978	364.62

SITE NUMBER 341640119074301 LOCAL NUMBER 002N022W12A02S

ABOUT 0.5 MI EAST OF INTERSECTION OF HWY 232 AND LOS ANGELES AVENUE. DRILLED IRRIGATION WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN. DEPTH 121 FT. PERFORATED 40-121 FT. ALTITUDE OF LSD 142 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 29.28 FEET BELOW LAND SURFACE DATUM NOV 15, 1978.

LOWEST WATER LEVEL 29.28 FEET BELOW LAND SURFACE DATUM NOV 15, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 15, 1978	29.28

SITE NUMBER 341557119074401 LOCAL NUMBER 002N022W12R01S

ABOUT 0.5 MI WEST OF INTERSECTION OF ROSE AVENUE AND LOS ANGELES AVENUE. DRILLED IRRIGATION WATER-TABLE WELL IN ALLUVIUM. DIAM 20 IN. DEPTH 147 FT. PERFORATED 90-130 FT. ALTITUDE OF LSD 135.1 FT. RECORDS AVAILABLE 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 20.54 FEET BELOW LAND SURFACE DATUM MAY 29, 1980.

LOWEST WATER LEVEL 120.50 FEET BELOW LAND SURFACE DATUM MAY 10, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 15, 1978	42.05

SITE NUMBER 342721119122001 LOCAL NUMBER 004N022W05L08S

EAST OF OJAI. DRILLED IRRIGATION WATER-TABLE WELL IN SAND OF QUATERNARY AGE. DIAM 11 IN. DEPTH 525 FT. CASED 0-525 FT. PERFORATED 250-525 FT. ALTITUDE OF LSD 890.7 FT. RECORDS AVAILABLE 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 38.20 FEET BELOW LAND SURFACE DATUM APR 18, 1978.

LOWEST WATER LEVEL 168.70 FEET BELOW LAND SURFACE DATUM DEC 08, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 28, 1978	100.10

INDEX

Page
Abondigas Creek above Lake Gregory at Crestline.......... 190
Accuracy of field data and computed results..... 20
Acre-foot, definition of.......... 3
Agua Caliente Creek near Warner Springs.......... 256
Alamo Pintado Creek near Solvang.......... 512
Alamo River at Drop No. 3, near Calipatria...... 143
Alamo River near Niland.......... 146
Algae, definition of.......... 3
Alhambra Wash at Klingerman Street near Montebello.......... 419
Alisal Reservoir near Solvang.......... 513
Aliso Creek at El Toro.......... 285
All-American Canal, below Drop 1, near Calexico.......... 128
  below Pilot Knob wasteway.......... 127
  near Imperial Dam, Ariz.-Calif.......... 125
Amargosa River at Tecopa.......... 139
Andreas Creek near Palm Springs.......... 183
Antelope Valley, crest-stage partial-records, stations in.......... 537
Aquifer, definition of.......... 3
Arroyo Burro Creek at Santa Barbara.......... 497
Arroyo Seco (tributary to Los Angeles River) near Pasadena.......... 417
Arroyo Simi near Simi.......... 433
Artesian, definition of.......... 3
Atascadero Creek near Goleta.......... 499

Bacteria, definition of.......... 5
Bautista Creek at Valle Vista.......... 352
Beacon Creek at Helendale.......... 536
Bed material, definition of.......... 5
Beeler Creek at Pomerado Road, near Poway....... 247
Benthic organisms, definition of.......... 5
Big Bear Lake near Big Bear Lake.......... 303
Big Rock Creek near Valyermo.......... 210
Big Tujunga Creek below Hansen Dam.......... 415
Big Tujunga Creek near Sunland.......... 414
Biochemical oxygen demand, definition of........ 5
Biomass, definition of.......... 5
Bishop Creek below powerplant No. 6, near Bishop.......... 217
Boom Creek near Barstow.......... 537
Borrego Palm Creek near Borrego Springs.......... 170
Bottom material, definition of.......... 6
Brea Creek below Brea Dam, near Fullerton....... 408
Bristol Lake basin, crest-stage partial-record station in.......... 536
Buckhorn Creek near Valyermo.......... 537

Cachuma, Lake, near Santa Ynez.......... 511
Cajon Creek near Keenbrook.......... 333
Calleguas Creek at Camarillo State Hospital..... 435
Campo Creek near Campo.......... 235
Carbon Creek below Carbon Canyon Dam.......... 386
Carpinteria Creek near Carpinteria.......... 494
Caruthers Creek near Ivanpah.......... 140
Casitas, Lake, near Casitas Springs.......... 485
Cells/volume, definition of.......... 6
Cfs-day, definition of.......... 6
Chemical oxygen demand, definition of.......... 6
Chino Canyon Creek near Palm Springs.......... 180
Chino Creek at Schaefer Avenue, near Chino...... 357
Chlorophyll, definition of.......... 6
City Creek near Highland.......... 310
Collection and computation of data, stage and water-discharge records.......... 17
Collection and examination of data, water-quality records.......... 21
Collection of the data, ground-water levels..... 23
Colorado River, above Imperial Dam, Ariz.-Calif. 78
  at Needles.......... 39
  at northerly international boundary, above Morelos Dam, near Andrade.......... 103
  at Palo Verde Dam, Ariz.-Calif.......... 69
  below Davis Dam, Ariz.-Nev.......... 36
  below Hoover Dam, Ariz.-Nev.......... 26
  below Imperial Dam, schematic diagram of...... 136
  below Laguna Dam, Ariz.-Calif.......... 98
  below Parker Dam, Ariz.-Calif.......... 55

Page
Colorado River near Topock, Ariz.......... 40
Colorado River aqueduct, near Parker Dam Ariz.-Calif.......... 44
Colorado River aqueduct near San Jacinto........ 45
Color unit, definition of.......... 6
Conejo Creek above Highway 101, near Camarillo.. 434
Contents, definition of.......... 6
Control, definition of.......... 6
Control structure, definition of.......... 6
Cooperation.......... 2
Cottonwood Creek (head of Tijuana River) above Tecate Creek, near Dulzura.......... 234
Coyote Creek (tributary to Salton Sea) near Borrego Springs.......... 169
Coyote Creek (tributary to San Gabriel River) at Los Alamitos.......... 411
Coyote Creek (tributary to Ventura River), near Oak View.......... 483
  near Ventura.......... 486
Crest-stage partial-record stations, discharge at.......... 536
Cubic foot per second, definition of.......... 6
Cucamonga Creek near Mira Loma.......... 358
Cushenberry Creek near Lucerne Valley.......... 536
Cuyama River, below Buckhorn Canyon, near Santa Maria.......... 526
  below Twitchell Dam.......... 529

Dale Lake basin, crest-stage partial-record stations in.......... 536
Darwin Creek near Darwin.......... 137
Data, field, accuracy of and computed results... 20
  explanation of, ground-water levels.......... 23
    surface-water records.......... 17
    water-quality records.......... 21
  other data available.......... 20
Deep Creek (head of Mojave River) near Hesperia. 188
Deep Creek (tributary to Salton Sea) near Palm Desert.......... 184
Definition of terms.......... 3
Devil Canyon Creek near San Bernardino.......... 335
Discharge, partial-record stations.......... 536
  crest-stage partial-record stations.......... 536
  miscellaneous measurements.......... 538
  definition of.......... 7
Dissolved, definition of.......... 7
Diversity index, definition of.......... 7
Downstream order and station number.......... 13
Drainage area, definition of.......... 7
Drainage basin, definition of.......... 7

East Twin Creek near Arrowhead Springs.......... 321
El Capitan Reservoir near Lakeside.......... 242
El Modena-Irvine Channel near Irvine.......... 291
Emerson Lake basin, crest-stage partial-record stations in.......... 536
Explanation of, ground-water level records...... 23
  stage and water-discharge records.......... 17
  water-quality records.......... 21

Fish Creek near Duarte.......... 403
Fortynine Palms Creek near Twentynine Palms..... 536
Ft^3/s-day, definition of.......... 6
Fullerton Creek, at Richman Avenue, at Fullerton 410
  below Fullerton Dam, near Brea.......... 409

Gage height, definition of.......... 7
Gaging station, definition of.......... 7
Gaviota Creek near Gaviota.......... 504
Gibraltar Reservoir, contents of.......... 507
Gila Gravity Main Canal at Imperial Dam, Ariz.-Calif.......... 122
Gourd Creek near Ludlow.......... 536
Gregory, Lake, at Crestline.......... 191
Ground-water levels, by county.......... 539
  Imperial County.......... 539
  Inyo County.......... 543
  Kern County.......... 549
  Los Angeles County.......... 553
  Mono County.......... 555
  Orange County.......... 556

Page

Ground-water levels, by county (Continued)
  Riverside County 557
  San Bernardino County 566
  San Diego County 581
  San Luis Obispo County 590
  Santa Barbara County 590
  Ventura County 594
Guejito Creek near San Pasqual 252

Hardness, definition of 7
Havasu, Lake, near Parker Dam, Ariz.-Calif. 53
Hemet, Lake, near Idyllwild 349
Hodges, Lake, near Escondido 254
Hopper Creek near Piru 456
Houston Creek above Lake Gregory at Crestline 189
Houston Creek below Lake Gregory at Crestline 192
Huasna River near Arroyo Grande 528
Hydrologic bench-mark station 16
Hydrologic conditions 3
Hydrologic Unit 7

Introduction 1

Jalama Creek near Lompoc 505
Jameson Lake, contents of 506

Keys Creek tributary at Valley Center 461

Lakes and reservoirs:
  Alisal Reservoir near Solvang 513
  Big Bear Lake near Big Bear Lake 303
  Cachuma, Lake, near Santa Ynez 511
  Casitas, Lake, near Casitas Springs 485
  El Capitan Reservoir near Lakeside 242
  Gregory, Lake, at Crestline 191
  Gibraltar Reservoir 507
  Havasu, Lake, near Parker Dam, Ariz.-Calif. 53
  Hemet, Lake, near Idyllwild 349
  Hodges, Lake, near Escondido 254
  Jameson Lake 506
  Lower Otay Reservoir near Chula Vista 239
  Matilija Reservoir at Matilija Hot Springs 478
  Mono Lake near Mono Lake 229
  Piru, Lake, near Piru 452
  Rodriguez Reservoir at Rodriguez Dam, Baja California, Mexico 237
  San Vicente Reservoir near Lakeside 243
  Sweetwater Reservoir near National City 241
  Vail Lake near Temecula 271
  Wohlford, Lake, near Escondido 255
Las Flores Creek near Oceanside 278
Lee Vining Creek near Lee Vining 233
Light-attenuation coefficient, definition of 8
Little Rock Creek near Little Rock 213
Little San Gorgonio Creek near Beaumont 316
Local well numbers 15
Lockwood Creek, at Gorge, near Stauffer 446
Lone Pine Creek near Keenbrook 334
Long Creek near Desert Hot Springs 536
Los Angeles River, at Long Beach 422
  at Los Angeles 416
  at Sepulveda Dam 412
  at Willow Street Bridge, at Long Beach 423
Los Angeles River basin, schematic diagram of 400
Los Penasquitos Creek, below Poway Creek, near Poway 248
  near Poway 249
Lower Otay Reservoir near Chula Vista 239
Lucerne Dry Lake basin, crest-stage partial-record stations in 536
Lytle Creek, at Colton 336
  near Fontana 331

Macrophytes, definition of 8
Malibu Creek at Crater Camp, near Calabasas 432
Maria Ygnacio Creek at University Drive, near Goleta 498
Matilija Creek, at Matilija Hot Springs 479
  North Fork, at Matilija Hot Springs 481
Matilija Reservoir at Matilija Hot Springs 478
Meeks and Daley Canal near Colton 330
Metamorphic stage, definition of 8
Methylene blue active substance, definition of 8
Micrograms per gram, definition of 8
Micrograms per liter, definition of 8
Miguelito Creek at Lompoc 520
Mill Creek (tributary to Mono Lake) below Lundy Lake, near Mono Lake 230

Page

Mill Creek (tributary to Santa Ana River) near Yucaipa 306
Milligrams per liter, definition of 8
Mission Creek (Salton Sea basin) near Desert Hot Springs 179
Mission Creek (tributary to Pacific Ocean), at Santa Barbara 537
  near Mission Street, at Santa Barbara 496
Mission Creek basin, crest-stage partial-record stations in 537
Mojave River, at Afton 209
  at Barstow 208
  at lower narrows, near Victorville 195
  below Forks Reservoir, near Hesperia 194
  near Hodge 207
  West Fork, near Hesperia 193
Mojave River Basin, crest-stage partial-records, stations in 536
Mono Lake near Mono Lake 229
Murrieta Creek at Temecula 272

National Geodetic Vertical Datum of 1929 (NGVD). 8
National stream-quality accounting network 16
Nekton, definition of 8
New River, at international boundary, at Calexico 151
  near Westmorland 164
Numbering system for wells and miscellaneous sites 14

Oak Creek near Mojave 214
Oso Creek at Crown Valley Parkway, near Mission Viejo 284
Organism, definition of 8
Other data available 20
Owens River, at Keeler Bridge, near Lone Pine 228
  below Tinemaha Reservoir, near Big Pine 218

Pacoima Creek near San Fernando 413
Palm Canyon Creek near Palm Springs 182
Palo Verde Canal near Blythe 62
Palo Verde Irrigation District Anderson Drain near Palo Verde 77
Palo Verde Irrigation District Olive Lake Drain near Blythe 70
Palo Verde Irrigation District Outfall Drain nr Palo Verde 72
Partial-record stations, crest-stage 536
  definition of 9
  discharge at 536
Particle size, definition of 9
Particle-size classification, definition of 9
Pauma Creek near Pauma Valley 258
Percent composition or percent of total, definition of 9
Periphyton, definition of 9
Pesticide program 17
Pesticides 9
Picocurie, definition of 9
Pilot Knob powerplant and wasteway near Pilot Knob 126
Pine Creek at division box, near Bishop 216
Pine Creek near Palmdale 537
Pine Tree Creek near Mojave 215
Pipes Creek near Yucca Valley 536
Piru Creek, above Frenchmans Flat 447
  above Lake Piru 449
  below Santa Felicia Dam 453
Piru, Lake, near Piru 452
Plankton, definition of 9
Plunge Creek near East Highlands 308
Polychlorinated biphenyls, definition of 10
Poway Creek near Poway 245
Primary productivity 10
Publications of techniques of water-resources investigations 24
Purisima Creek near Lompoc 537

Quail Wash near Joshua Tree 536

Radiochemical program 17
Rattlesnake Creek at Poway 246
Records of discharge collected by agencies other than the Geological Survey 20
Reservoirs. *See* lakes and reservoirs.
Return surface flows below Imperial Dam, Ariz.-Calif. 130

Page
Rio Hondo, above Whittier Narrows Dam.......... 418
  below Whittier Narrows Dam.......... 420
  near Downey.......... 421
Riverside Water Quality Control Plant at Riverside Narrows, near Arlington.......... 340
Rodriguez Reservoir at Rodriguez Dam, Baja California, Mexico.......... 237
Runoff map.......... 4
Rush Creek, above Grant Lake, near June Lake.... 232
  below Agnew Lake, near June Lake.......... 231

Salsipuedes Creek (tributary to Santa Ynez River) near Lompoc.......... 516
Salt Creek (Death Valley) near Stovepipe Wells.......... 138
Salt Creek (Salton Sea basin) near Mecca.......... 142
Salton Sea, flow from Mexico at International Boundary.......... 141
  inflow to.......... 141
  near Westmorland.......... 141
Salton Sea basin, crest-stage partial-record station in 536
San Antonio Creek (Santa Ana River basin) below San Antonio Dam.......... 356
San Antonio Creek (tributary to Pacific Ocean), at Los Alamos.......... 523
  near Casmalia.......... 524
San Antonio Creek (Ventura River basin) at Casitas Springs.......... 482
San Bernardino Water Quality Control Plant at San Bernardino.......... 324
San Diego Creek, at Campus Drive, near Irvine... 296
  at Sand Canyon Avenue, near Irvine.......... 286
San Diego River near Santee.......... 244
San Felipe Creek, near Julian.......... 168
  near Westmorland.......... 172
San Gabriel River, above Whittier Narrows Dam... 405
  at Azusa powerhouse, at Azusa.......... 402
  at Spring Street, near Los Alamitos.......... 407
  at Whittier Narrows.......... 406
  below Santa Fe Dam, near Baldwin Park.......... 404
  East Fork, near Camp Bonita.......... 401
San Gabriel River basin, schematic diagram of... 302
San Gorgonio River, near Banning.......... 176
  near White Water.......... 177
San Jacinto River, at Railroad Canyon weir, near Elsinore.......... 353
  near Elsinore.......... 354
  near San Jacinto.......... 350
San Jose Creek (tributary to Pacific Ocean), at Goleta.......... 503
  near Goleta.......... 501
San Juan Creek at San Juan Capistrano.......... 279
San Luis Rey River, at Monserate Narrows, near Pala.......... 260
  at Oceanside.......... 263
  near Bonsall.......... 262
  West Fork, near Warner Springs.......... 257
San Timoteo Creek near Loma Linda.......... 319
San Timoteo Creek near Redlands.......... 317
San Vicente Reservoir near Lakeside.......... 243
San Ysidro Creek at Montecito.......... 537
San Ysidro Creek basin, crest-stage partial-record stations in.......... 537
Santa Ana Creek near Oak View.......... 484
Santa Ana River, at Ball Road, in Anaheim.......... 387
  at E Street, near San Bernardino.......... 328
  at Imperial Highway, near Anaheim.......... 376
  at Mission Boulevard, at Riverside.......... 337
  at MWD Crossing, near Arlington.......... 338
  at Prado Park, near Corona.......... 344
  at Santa Ana.......... 395
  at Waterman Avenue, at San Bernardino.......... 312
  below Prado Dam.......... 360
  near Mentone.......... 308
  schematic diagram of.......... 400
Santa Ana River spreading diversion, below Imperial Highway, near Anaheim.......... 382
Santa Clara River above railroad station, near Lang.......... 436
  at Los Angeles-Ventura County line.......... 438
  at Montalvo.......... 471
  near Santa Paula.......... 463
South Fork Santa Clara River, at Saugus.......... 437

Page
Santa Cruz Creek near Santa Ynez.......... 510
Santa Margarita River, at Ysidora.......... 277
  near Fallbrook.......... 274
  near Temecula.......... 273
Santa Maria Creek near Ramona.......... 253
Santa Maria River at Guadalupe.......... 535
Santa Paula Creek near Santa Paula.......... 464
Santa Rita Creek near Lompoc.......... 537
Santa Ynez River, above Gibraltar Dam, near Santa Barbara.......... 507
  at Jameson Lake, near Montecito.......... 506
  near Lompoc.......... 518
  at Pine Canyon, near Lompoc.......... 521
  at Solvang.......... 514
  below Gibraltar Dam, near Santa Barbara.......... 508
  below Los Laureles Canyon, near Santa Ynez.... 509
Santa Ynez River basin, crest-stage partial-record stations in.......... 537
Santa Ysabel Creek, near Ramona.......... 250
  near San Pasqual.......... 251
Santiago Creek, at Modjeska.......... 393
  at Santa Ana.......... 394
Saticoy diversion near Saticoy.......... 468
Sediment, collection and examination of.......... 22
  definition of.......... 10
Sespe Creek, near Fillmore.......... 458
  near Wheeler Springs.......... 457
Sisquoc River, near Garey.......... 534
  near Sisquoc.......... 531
Snow Creek near White Water.......... 178
Sodium-adsorption-ratio, definition of.......... 11
Solute, definition of.......... 11
Special networks and programs.......... 16
Specific conductance, definition of.......... 11
Spencer Canyon Creek near Fairmont.......... 537
Stage-discharge relation, definition of.......... 11
Streamflow, definition of.......... 11
Substrate, definition of.......... 11
Surface area, definition of.......... 12
Surficial bed material, definition of.......... 12
Suspended, definition of.......... 12
Sweetwater Reservoir near National City.......... 241
Sweetwater River near Descanso.......... 240
Sycamore Creek at Santa Barbara.......... 537
Sycamore Creek basin, crest-stage partial-record stations in.......... 537

Tahquitz Creek near Palm Springs.......... 181
Taxonomy, definition of.......... 12
Temecula Creek near Aguanga.......... 270
Temescal Creek near Corona.......... 355
Temperature, water, collection and examination of.......... 21
Tepusquet Creek near Sisquoc.......... 533
Thermograph, definition of.......... 12
Tijuana River, near Dulzura.......... 236
  near Nestor.......... 238
Tons per acre-foot, definition of.......... 13
Tons per day, definition of.......... 13
Topanga Creek near Topanga Beach.......... 431
Total, definition of.......... 13
Total load, definition of.......... 13
Total recoverable, definition of.......... 13
Turbidity, collection of.......... 23
  definition of.......... 13

Vail Lake near Temecula.......... 271
Vallecito Creek near Julian.......... 171
Ventura River near Ventura.......... 487

Warm Creek, floodway at San Bernardino.......... 323
  near San Bernardino.......... 329
Wasteway No. 1 near Mecca.......... 187
Water analysis.......... 21
Waterman Canyon Creek near Arrowhead Springs.... 322
WDR, definition of.......... 13
Whitewater River, at Indio.......... 185
  a[illegible]hite Water.......... 173
  ne[illegible] Mecca.......... 186
Wholford, Lake, near Escondido.......... 255
WSP, definition of.......... 13

Zaca Creek near Buellton.......... 515

USGPO-1981-790-448/154

October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	$2.54\mathrm{x}10^{1}$	millimeters (mm)
	$2.54\mathrm{x}10^{-2}$	meters (m)
feet (ft)	$3.048\mathrm{x}10^{-1}$	meters (m)
miles (mi)	$1.609\mathrm{x}10^{0}$	kilometers (km)
	Area	
acres	$4.047\mathrm{x}10^{3}$	square meters (m^2)
	$4.047\mathrm{x}10^{-1}$	square hectometers (hm^2)
	$4.047\mathrm{x}10^{-3}$	square kilometers (km^2)
square miles (mi^2)	$2.590\mathrm{x}10^{0}$	square kilometers (km^2)
	Volume	
gallons (gal)	$3.785\mathrm{x}10^{0}$	liters (L)
	$3.785\mathrm{x}10^{0}$	cubic decimeters (dm^3)
	$3.785\mathrm{x}10^{-3}$	cubic meters (m^3)
million gallons	$3.785\mathrm{x}10^{3}$	cubic meters (m^3)
	$3.785\mathrm{x}10^{-3}$	cubic hectometers (hm^3)
cubic feet (ft^3)	$2.832\mathrm{x}10^{1}$	cubic decimeters (dm^3)
	$2.832\mathrm{x}10^{-2}$	cubic meters (m^3)
cfs-days	$2.447\mathrm{x}10^{3}$	cubic meters (m^3)
	$2.447\mathrm{x}10^{-3}$	cubic hectometers (hm^3)
acre-feet (acre-ft)	$1.233\mathrm{x}10^{3}$	cubic meters (m^3)
	$1.233\mathrm{x}10^{-3}$	cubic hectometers (hm^3)
	$1.233\mathrm{x}10^{-6}$	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	$2.832\mathrm{x}10^{1}$	liters per second (L/s)
	$2.832\mathrm{x}10^{1}$	cubic decimeters per second (dm^3/s)
	$2.832\mathrm{x}10^{-2}$	cubic meters per second (m^3/s)
gallons per minute (gal/min)	$6.309\mathrm{x}10^{-2}$	liters per second (L/s)
	$6.309\mathrm{x}10^{-2}$	cubic decimeters per second (dm^3/s)
	$6.309\mathrm{x}10^{-5}$	cubic meters per second (m^3/s)
million gallons per day	$4.381\mathrm{x}10^{1}$	cubic decimeters per second (dm^3/s)
	$4.381\mathrm{x}10^{-2}$	cubic meters per second (m^3/s)
	Mass	
tons (short)	$9.072\mathrm{x}10^{-1}$	megagrams (Mg) or metric tons